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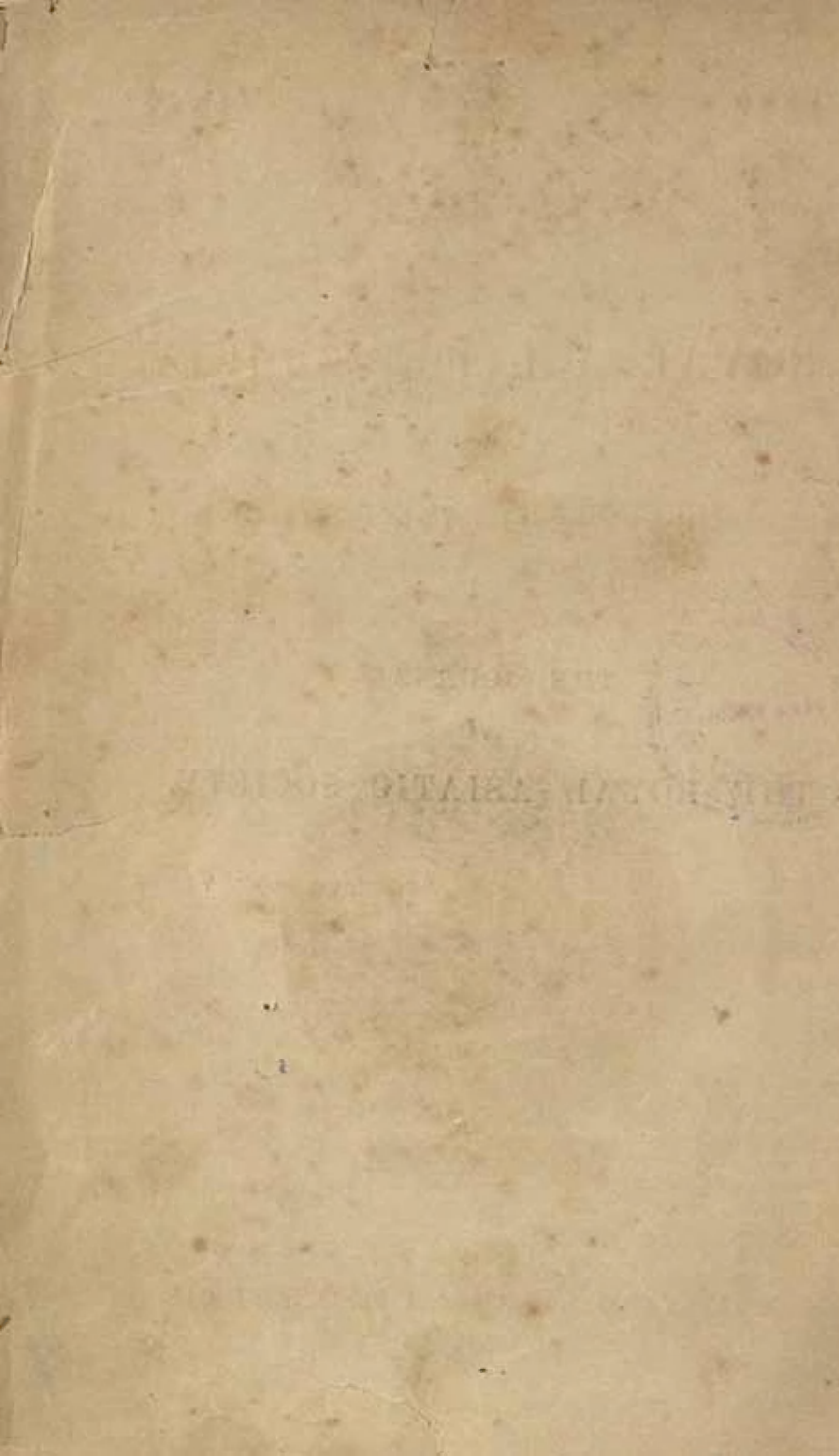
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THE JOURNAL
OF
THE ROYAL ASIATIC SOCIETY.

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1890

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THE
JOURNAL

OF THE

ROYAL ASIATIC SOCIETY

OF

GREAT BRITAIN AND IRELAND

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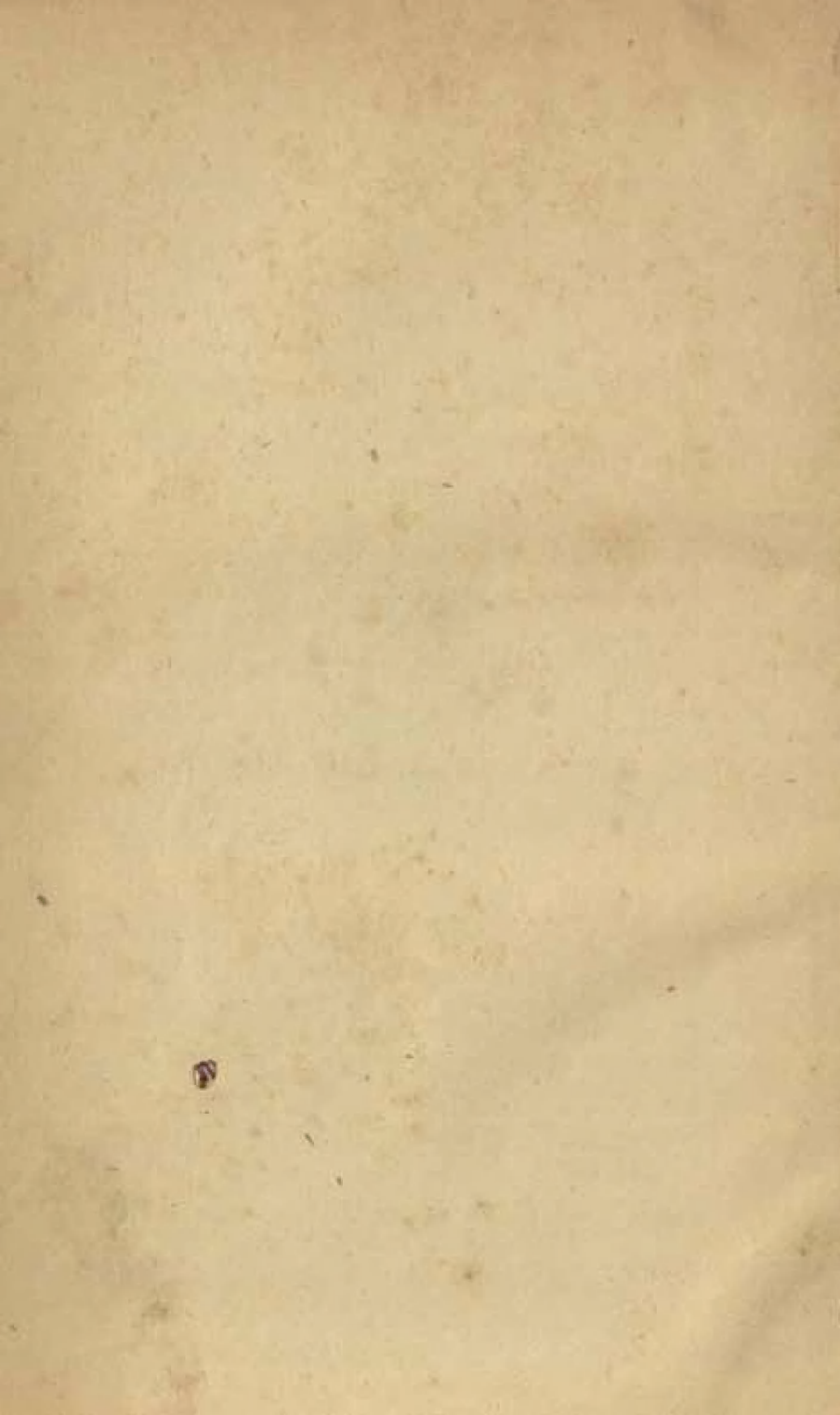


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ALPHABETICAL LIST OF AUTHORS

A CATALOGUE
OF THE
CHINESE MANUSCRIPTS
IN THE
LIBRARY OF THE
ROYAL ASIATIC SOCIETY.

ERRATA.

No. 6	For	<i>Hwa ch'ien</i>	read	<i>Hua chien.</i>
" 18	"	<i>K'o</i>	"	<i>Ko.</i>
" 30	"	<i>Lín</i>	"	<i>Lien.</i>
" 33	"	<i>tsoo</i>	"	<i>tsu.</i>
" 34	"	樓	"	樓
" 47	"	"	"	"
" 69	"	<i>chung</i>	"	<i>tsung.</i>
" 73	"	<i>ch'ien</i>	"	<i>chien.</i>
" 100	"	<i>tsöen</i>	"	<i>ts'an.</i>
" 118	"	No. 125	"	No. 126.
" 146	"	<i>ch'ien</i>	"	<i>chien.</i>
" 191	"	<i>che</i>	"	<i>chih.</i>
" 216	"	故	"	古
" 225	"	"	"	"
" 251	"	245	"	246.
" 262	"	<i>shoo</i>	"	<i>shu.</i>
" 269	"	右	"	古
" 347	"	茶	"	茶
" 361	"	<i>pe</i>	"	<i>pei.</i>
" 424	"	審	"	番
" 548	"	<i>tsu</i>	"	<i>tsou.</i>

THE following Catalogue was compiled between 1879 and 1881 by Mr. Henry F. Holt, then Joint-Secretary of the Royal Asiatic Society, with a view to afford greater facilities of reference to the valuable Chinese Library of this Society.

The Council having decided to print the Catalogue, Mr. Giles, of the Chinese Consular Service, has been kind enough to correct the proofs. Mr. Holt's preface was as follows:—

“The plan which has been pursued has been to arrange the works in various book-cases named after China itself or after eminent persons whose names are associated with that country.

“The letters and figures which accompany the names indicate the exact position of each work in its respective case, so that no difficulty need ever be experienced by the Librarian in selecting or replacing any work which may be required, whether he be acquainted with the language or not.

“Another feature which has been introduced consists in the series of cross references which have been given. In this Library, as in others, it occurs that several works are incomplete. With a view therefore of, as far as possible, remedying this defect, references have been made to the Catalogues of the other Chinese Libraries in London, namely those of the British Museum, the India Office, and University College, Gower Street. These are respectively indicated by the letters B.M. (British Museum), I.O.O. (India Office Catalogue), and L.U. (London University). By these means the Student, finding an imperfect copy of the work of which he is in search on these shelves, can tell where other and perhaps perfect copies may be found.

“Printed copies of the Catalogue of the India Office and British Museum Libraries will be found here. That of University College is a Manuscript of 140 pages, each containing five slips. A copy of it was made by Mr. H. J. Holt, and will be found in this Library. The method of reference to it will be seen on the first page.

“Other references have also been made to Wylie (*Notes on Chinese Literature*), Cordier (*Bibliotheca Sinica*), and Mayers (*Chinese Readers' Manual*), as well as to Professor Kidd's Catalogue of this Library made in 1838. Names of translators have been added, as far as known, together with occasional notes of general literary interest.

“This Library, which contains some 5000 volumes, cannot of course compare with the national collection at the British Museum, which has four times as many. But there is good reason for believing that it is quite on a par with any other. In it almost every branch of Chinese Literature is represented, and it contains many works not to be found in any other collection in this country.”

It is to be hoped that members of the Society interested in Chinese studies will, by donations either of books or money, help to make this useful collection more complete.

T. W. RHYS DAVIDS,
Secretary, R.A.S.

ROYAL ASIATIC SOCIETY,
22, Albemarle Street,
January, 1889.

CATALOGUE
OF
CHINESE MANUSCRIPTS.

1. 金瓶梅

Chin, P'ing, Mei.

"The Story of Chin, P'ing, and Mei." A Novel. A Description of Chinese manners and customs, especially with reference to Courtship and Marriage, the design of which, according to the Preface, is to promote Virtue and to discourage Vice. 2 cases, 20 vols. *Ref.* B.M. p. 11.

[*Amherst* I, A 1-2.]

2. 金瓶梅

Chin, P'ing, Mei.

"The Story of Chin, P'ing, and Mei." A Novel attributed to Wang Shih-ching. *Ref.* B.M. p. 11. [*Amherst* I, A 3-4.]

3. 東周列國全志

Tung Chou lieh kuo ch'üan chih.

A History embracing the period from the Eastern Chou Dynasty, B.C. 255 to the commencement of the Chin Dynasty, B.C. 249. With illustrations. Edited by 蔡元放 Ts'ai Yüan-fang. 2 cases, 24 vols. *Ref.* B.M. p. 207.

[*Amherst* I, A 5.]

4. 太平廣記

T'ai p'ing kuang chi.

"Extensive Records of General Peace and Prosperity." Being an abstract of History, Statistics, Topography, &c., of the different Provinces of China.

[*Amherst* I, A 6—11.]

5. 蘇黃尺牘

Su huang ch'ih tu.

"A Model Letter Writer." 3 vols. 1801.

[Amherst II, A 1.]

6. 花箋記

Hua ch'ien chi.

"The Story of the Flowery Note Paper." A Novel.
 Edited, with Notes, by 金聖嘆 Chin Shêng-t'an. 4 vols.
 6 chüan. Ref. B.M. p. 106. See No. 25.

[Amherst II, A 2.]

7. 定鼎奇文 or 大明傳

Ting ting ch'i wên, or, Ta ming chuan.

4 chüan, 22 Hui. No date.

[Amherst II, A 3.]

8. 金石姻緣

Chin Shih yin yuan.

The Celestially brought about union of Chin and Shih.
 Ref. L.U. 38, 5. See No. 114.

[Amherst II, A 4.]

9. 紅梨記

Hung li chi.

"The Red Pear Record." One of the "Sixty Plays."
 2 vols. 30 chih. 1737. Ref. B.M. p. 82.

[Amherst II, A 5.]

10. 還魂記

Huan hun chi.

"The Returned Ghost." A Play. 4 vols. and 55 chih.
 Ref. B.M. p. 85.

[Amherst I, A 6.]

11. 長生殿

Ch'ang shêng tien.

"The Palace of Longevity." A Drama. 1679. Ref. B.M.
 p. 83.

[Amherst II, A 7.]

12. 紫釵記

Tzū ch'ai chi.

"The Story of the Purple Hair-pin." One of the "Sixty Plays." 2 chüan. *Ref.* B.M. p. 221; L.U. 105, 4.

[*Amherst* II, A 8.]

13. 鳳求凰

Fêng ch'iu huang.

"The Phoenix in search of a Wife." A Novel. 2 vols. 24 chih.

[*Amherst* II, A 9.]

14. 玉搔頭

Yü sao t'ou.

2 chüan, and 30 chih.

[*Amherst* II, A 10.]

15. 真鸞交

Chên luan chiaio.

2 vols.

[*Amherst* II, A 11.]

16. 奈何天

Nai ho t'ien.

"Seek Aid from Heaven." 2 vols. 30 chih.

[*Amherst* II, A 12.]

17. 意中緣

I chung lu.

"A book of hidden meanings," being good examples of phrases:—joking, punning, loose, farcical, &c. 2 vols. 30 chih.

[*Amherst* II, A 13.]

18. 南柯記

Nan Ko chi.

An Account of the Kingdom of Nan Ko. 2 vols. 35 chih. *Ref.* B.M. p. 127.

[*Amherst* II, A 14.]

19. 牡丹亭還魂

Mou tan t'ing huan hun.

"The Returning Spirit of the Peony Bower." 2 vols.
8 chüan. [Amherst II, A 15.]

20. 巧團圓傳奇

Ch'iao t'uan yüan chuan ch'i.

"The Secret Affectionate Union." A Drama. 2 vols.
Ref. B.M. p. 133. [Amherst II, A 16.]

21. 牡丹亭

Mou tan t'ing.

"The Story of the Peony Bower." One of the "Sixty
Plays." 2 vols. 8 chüan. Ref. B.M. p. 158.
[Amherst II, A 17.]

22. 名媛詩鈔

Ming yüan shih ch'ao.

"Odes to Celebrated Beauties." 4 vols. 6 chüan. 1803.
[Amherst II, A 18.]

23. 雷峰塔

Lei fêng t'a.

"The Thunder-peak Pagoda." A Novel. 4 vols. Ref.
B.M. p. 149. Translated for the *Phoenix*, by C. Carroll
and another. Also by Julien, under the title of *Blanche et
Bleue*. [Amherst II, A 19.]

24. 聖教日課

Shêng chiao jih k'o.

"Daily Religious Exercises." A Roman Catholic work
published in Chinese. It was printed in the 首善堂 the
"Hall of Supreme Goodness," within the West Gate of
Peking. 3 vols. 1800. Ref. B.M. p. 143.

[Amherst II, A 20.]

25. 花箋記

Hua ch'ien chi.*

"The Story of the Flowery Note Paper." Translated by Thoms. 4 vols. Ref. B.M. p. 106; L.U. 37, 3. See No. 6.
[Amherst II, A 21.]

26. 琵琶記

P'i pa chi.

"The Story of a Lute." One of the "Sixty Plays." 6 vols.
Ref. B.M. p. 163. [Amherst II, A 22.]

27. 牡丹亭

Mou tan t'ing.

"The Story of the Peony Bower."
[Amherst II, A 23.]

28. 宋詩別裁

Sung shih pieh ts'ai.

4 vols. 8 chüan. 1763. [Amherst II, A 24.]

29. 牡丹亭還魂

Mou tan t'ing huan hun.

"The Returning Spirit of the Peony Bower."
[Amherst II, A 25.]

* This work was translated by P. P. Thoms under the title of "Chinese Courtship," in verse, Chinese and English, to which is added an Appendix treating of the Revenue of China. London, Macao, 1824, 8vo. 324 pp. See also Remusat, *Mémoires Asiatiques* II. p. 334. German, by H. Kurtz (*Das Blumenblatt*), St. Gallen, 1836, 8vo.

30. Case containing the following plays :

邯 鄲 夢

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2 vols. 30 chih.

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IV. The **Lin hsiang pan.**

2 vols. 36 chih.

[*Amherst* II, A 26.]

31. 南 柯 記

Nan Ko chi.

"An Account of the Kingdom of Nan Ko." 2 vols.
35 chih. *Ref.* B.M. 127. [*Amherst* II, A 27.]

32. 牡 丹 亭

Mou tan t'ing.

"The Peony Bower." One of the "Sixty Plays." 4 vols.
8 chüan. [*Amherst* II, A 28.]

33. 香 祖 樓 等 八 種 曲

The **Hsiang tsu lou**, and 7 other plays. Namely :—

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3 桂 林 香 Kwei lin hsiang.

4 第 二 碑 Ti êrh pei.

5 各 青 樹 Ko ch'ing shu.

6 臨 川 夢 Lin ch'uan mêng.

7 雪 中 人 Hsüeh chung jen.

8 四 絃 秋 Ssü hsien ch'iu.

34. 今古奇觀續編十二樓

Chin ku ch'i kuan hsü pien shih êrh lou.

"The Twelve Chambers." A sequel to the "Wondrous Tales of Ancient and Modern Times." By 覺世 Chüo Shih. 6 vols. 1658. Ref. B.M. p. 101. [Amherst II, A 30.]

35. 更豈有此理

Kêng ch'i yu tz'u li.

2 vols. (with plates of subscriptions, &c.). Ref. L.U. 29, 4. [Amherst II, A 31.]

36. 雷峰塔

Lei fêng t'a.

"The Thunder-peak Pagoda." Otherwise known as the "History of the White Serpent." With a few illustrations. 4 vols. 5 chüan. 1806. Ref. B.M. p. 149. See No. 23. [Amherst II, A 32.]

37. 二度梅

Êrh tu mei.

"The Story of the Two Plumes." Illustrated. 6 vols. 6 chüan. Ref. B.M. p. 155; L.U. 123, 2. Translated into French by A. Piry, of the Chinese Customs Service. See No. 62. [Amherst II, A 33.]

38. 漁家樂

Yü chia lê.

4 vols.

[Amherst II, A 34.]

39. 尺牘類選

Ch'ih tu lei hsüan.

The full title is 霏屑軒尺牘類選. Fei hsiao hsien ch'ih tu lei hsüan. "A Model Letter Writer." Compiled by 陳世熙, Ch'ên Shih-hsi. 1802. Ref. B.M. p. 28. [Amherst I, B 1.]

40. 聊齋志異

Liao Chai chih i.

16 vols. *Ref.* B.M. p. 167; L.U. 52, 4; Kidd, p. 55.
Translated by H. A. Giles under the title of "Strange
Stories from a Chinese Studio." 2 vols. London, 1880.
[*Amherst* I, B 2.]

41. 鳳洲綱鑑

Fêng Chou Kang Chien.

"The Annals of General History." By 王鳳洲 Wang
Fêng-chou. In the Great Annals, first came the *T'ung*
Chien, next the *T'ung chien kang mu*, which is a reconstruc-
tion and condensation thereof, and then the present book
which is a much more abbreviated history, extending
from *Fu Hsi* downwards. *Ref.* Wylie, p. 21; Mayers, xix;
Kidd, p. 8.
[*Amherst* I, B 3—8.]

42. 情史

Ch'ing Shih.

"History of the Loves of Celebrities." By 詹詹 Chan
Chan. 12 vols. 24 chüan. 1784. *Ref.* B.M. p. 22.
[*Amherst* I, B 9.]

43. 文帝全書內函

Wên Ti ch'üan shu nei han.

The complete works of Wên Ti. Comprising Essays on the
Regeneration of the People, Filial Piety, Rewards and
Punishment, Prosperity, &c. 8 vols. 1801. *Ref.* Kidd,
p. 20; Wylie, p. 16.
[*Amherst* I, B 10.]

44. 封神演義

Fêng shên yen i.

"The Story of the Canonised Saints." A tale regarding
the Adventures of Wu Wang (B.C. 1122) the Founder of
the Chou Dynasty, in his contest between Chou Wang,
the last of the House of Shang. 1695. *Ref.* B.M. p. 55;
Kidd, p. 48; Wylie, p. 163.
[*Amherst* I, B 11-12.]

45. 玉嬌梨

Yü chiao li.

Commonly known as the Romance of "The Two Cousins."
Translated by A. Remusat in 1826, 2 vols. 12mo., and by
Julien in 1864 as "Les deux Consines." 4 vols. *Ref.* Wylie,
p. 163. [*Amherst* I, B 13.]

46. 說岳傳

Shuo Yō chuan.

"Biography of Yō Fei." A General who served under
the Sung Dynasty. [*Amherst* II, B 1.]

47. 況有江樓尺牘

K'uang yu chiang lou ch'ih tu.

"Models of Rhetoric and Elegant Style." 12 chüan.
[*Amherst* II, B 2.]

48. 平妖傳

P'ing yao chuan.

"The Story of the Pacification of the Elves and Fairies."
A Romance of the T'ang Dynasty. By 馮猶龍, Fêng
Yu-lung. 10 vols. 40 hui (1st vol. missing). 1750.
L.U. 69, 1. [*Amherst* II, B 3.]

49. 史記通鑑

Shih Chi T'ung Chien.

"The Historical Record." 4 cases, 39 vols. *Ref.* B.M.
p. 195. [*Amherst* II, B 4—7.]

50. 夜譚隨錄

Yeh tan sui lu.

"Evening Entertainments." A Collection of Tales.
2 vols. 12 chüan. *Ref.* B.M. p. 257.
[*Amherst* II, B 8.]

51. 玉嬌梨

Yü chiao li.

Commonly known as the Romance of "The Two Cousins."
4 vols. *Ref.* Wylie, p. 163. See No. 45. [*Amherst* II, B 9.]

52. 玉嬌梨

Yü chiao li.

Commonly known as the Romance of "The Two Cousins."
4 vols. *Ref.* Wylie, p. 163. See No. 45. [*Amherst* II, B 10.]

53. 國語

Kuo Yü.

"The Narratives of the States." By 左丘明 Tso Ch'iu
Ming. 4 vols. *Ref.* B.M. 218. [*Amherst* II, B 11.]

54. 雙鳳奇

Shuang fêng ch'i.

"The wonderful story of the two Phoenixes." An Historical Romance founded upon events which occurred during the Han Dynasty. 10 vols. 80 hui. *Ref.* B.M. p. 184. 1813.
[*Amherst* II, B 12.]

55. 桃花扇傳奇

Tao hua shan chuan ch'i.

"The Story of the Peach Blossom Fan." A Drama. By 孔稼郎 K'ung Chia-pu. *Ref.* B.M. p. 115; L.U. 100, 5. See No. 108.
[*Amherst* II, B 13.]

56. 金瓶梅

Chin, P'ing, Mei.

"The Story of Chin, P'ing, and Mei." A Novel attributed to Wang Shih-ching. Edited by 張竹坡 Chang Chu-pó. 3 cases, 20 vols. 1695. *Ref.* B.M. p. 11; L.U. 38, 2.
[*Amherst* II, B 14-15.]

57. 子不語

Tzŭ pu yŭ.

"Topics untouched by the Sage." 8 vols.

[Amherst II, B 16.]

58. 玉堂字彙

Yü T'ang Tzŭ hui.

The "Jade Hall" Dictionary. Compiled by 梅應祈 Mei Ying-ch'i. 4 vols. 1676. Ref. B.M. p. 155; L.U. 138, 5.

[Amherst II, B 17.]

59. 蜃樓志

Shên lou chih.

"The Story of the Sea Serpent." An account of a monster sometimes seen at sea, like a snake with horns, and which occasionally raises its body like a tower out of the water. 6 vols. 1804. See No. 85.

[Amherst II, B 18.]

60. 小倉山房尺牘

Hsiao ts'ang shan fang ch'ih tu.

"The Complete Letter Writer, (issued from) the Mountain Home of Hsiao-ts'ang." 4 vols. 6 chüan. 1797.

[Amherst II, B 19.]

61. 性理精義

Hsing li ch'ing i.

"The Essence of Works on Mental Philosophy." Compiled by order of the Emperor K'ang Hsi. By a Commission. Ref. B.M. p. 128.

[Amherst I, C 1.]

62. 二度梅傳

Êrh tu mei chuan.

"The Story of the Two Plumes." Ref. B.M. p. 155; L.U. 120, 3. See No. 37.

[Amherst I, C 2.]

63. 繪圖

Kuai yüan.

"The Deceptive Garden." 16 sections. 1774.

[Amherst I, C 3.]

64. 綉虎尺牘

Hsiu hu ch'ih tu.

"A Complete Letter Writer." 6 vols. 1796.

[Amherst I, C 4.]

65. 三國志

San Kuo chih.

"The History of the Three Kingdoms" of Wei, Shu and Wu. 2 cases, 20 vols.

[Amherst I, C 5-6.]

66. 新齊諧

Hsin ch'i hsieh.

"A new collection of Tales." Compiled by 隨園 戲
Sui Yüan-hsi. Called the 子不語 Tzū pu yü on the
margin. 12 vols. 24 chüan. 1800. Ref. L.U. 89, 4.

[Amherst I, C 7.]

67. 白圭全傳

Pö Kuei ch'üan chuan.

"The Story of the White Sceptre." A Novel. The "Kuei,"
a species of sceptre, was an ancient badge of authority
bestowed by the Emperor on Governors of Provinces. 4 vols.
1807.

[Amherst I, C 8.]

68. 後西遊記

Hou hsi yu chi.

"A later narrative of Travels in the West." Edited by
金聖嘆 Chin Shêng-t'an. 10 vols. 49 hui. 1750 (?).

[Amherst I, C 9.]

69. 十二種曲

Shih êrh chung ch'ü.

"Twelve Popular Odes," or Dramatic Pieces. Compiled
by 笠翁 Li Wêng. 3 cases, 24 vols. Ref. B.M. p. 183.

[Amherst I, C 10-12.]

70. 警 富 新 書

Ching fu hsin shu.

"A Warning to the Rich." By 梁天來 Liang T'een-lai.
6 vols. 1809. *Ref.* B.M. p. 132; Kidd, p. 21; L.U. 41, 2.
[Amherst I, C 13.]

71. 夜 譚 隨 錄

Yeh tan sui lu.

"Evening Entertainments." A Collection of Tales.
6 vols. 12 chüan. 1791. [Amherst I, C 14.]

72. 本 草 綱 目

Pên ts'ao kang mu.

"A General Outline of Plants and Herbs." This is considered the best Pharmacopœia as well as Botanical Work in China. 12 vols. and Introduction. 1801. *Ref.* Kidd, p. 16; B.M. p. 129; L.U. 128, 3. See No. 111.
[Amherst I, C 15.]

73. 唐 詩 合 解 箋 注

Tang shih ho chieh ch'ien chu.

A Selection of Poems by the most Celebrated Authors of the T'ang Dynasty (A.D. 618—905). Part I. 12 chüan. Part II. 4 chüan. 1732. *Ref.* B.M. p. 238.
[Amherst I, C 16.]

74. 戰 國 策

Chan kuo tsê.

"The Story of the Contending States." 10 chüan. 1581. *Ref.* B.M. p. 135. [Amherst II, C 1.]

75. 讀 史 論 畧

Tu shih lun luô.

"Discourses for Regulating the Study of History."
[Amherst II, C 2.]

76. 姑妄聽之

Ku wang t'ing chih.

"Old Wives' Tales." By 觀奕道人 Kuan Yi Tao-jen. 1809. *Ref.* L.U. 44, 4. [*Amherst* II, C 3.]

77. 粉粧樓全傳

Fên chuang lou ch'uan chuan.

"The Story of the Pavilion of Paint," with illustrations. An historical novel, in continuation of the Shuo tang chih chuan. 6 vols. 80 hui. 1806. *Ref.* B.M. p. 67. [*Amherst* II, C 4.]

78. 醵世錦囊全書

Ch'ou shih chin nang ch'üan shu.

"A Treasury of Information on Social Etiquette." By 鄒景揚 Tsou Ching-yang. 1 case, 12 vols. *Ref.* B.M. p. 220; Kidd, p. 35. [*Amherst* II, C 5.]

79. 海瑞案傳

Hai suy ngan chuan.

"Hai Sui's Legal Decisions." Edited by 李春芳 Li Ch'un-fang. 6 vols. 1606. *Ref.* Kidd, p. 38; L.U. 19, 3. [*Amherst* II, C 6.]

80. 希夷夢

Hsi-I Mêng.

"The Dreams of Hsi-I," a Taoist Doctor. A Novel. 2 cases. 7 vols. 40 chüan. 1809. *Ref.* B.M. p. 73; L.U. 21, 3. [*Amherst* II, C 7-8.]

81. 題文傳

Hui wên chuan.

"The Story of a Literary Puzzle." 6 vols. *Ref.* B.M. p. 133. [*Amherst* II, C 9.]

82. 增智裏補

Tsêng chih hsiang pu.

"Aids to Increase Knowledge."

[*Amherst* II, C 10.]

83. 禪真逸史

Ch'an chên yi shih.

"A History of Buddhist Saints." 10 vols. (1st vol. missing).

[*Amherst* II, C 11.]

84. 龍圖公案

Lung t'u kung ngan.

"The Criminal Cases of Lung T'u, or Dragon Face," a famous Chinese judge. 5 vols. 10 chüan. 1810. *Ref.* B.M. p. 148; L.U. 58, 5.

[*Amherst* II, C 12.]

85. 蜃樓志

Shên lou chih.

"The Story of the Sea Serpent." An account of a visionary monster seen at sea, said to be like a snake with horns, and like a dragon in the lower part of the body, having scales; sometimes assumes the form of a watch-tower, whence the name (*Morrison's Dictionary*). 6 vols. 24 chüan. 1804. *Ref.* Kidd, p. 52. See No 59.

[*Amherst* II, C 13.]

86. 依樣葫蘆

I yang hu lu.

A Descriptive Account of the various sorts of Gourds. 4 vols. 4 chüan. 1804.

[*Amherst* II, C 14.]

87. 紅樓夢

Hung lou mêng.

"The Dream of the Red Chamber." A Novel of very considerable repute in China. For epitome, see *Journal of China Branch of the Royal Asiat. Soc.* for 1885, p. 1. 2 cases, 20 vols. 1811. *Ref.* Kidd, p. 51; B.M. p. 209; Wylie, p. 162.

[*Amherst* II, C 15-16.]

88. 重訂廣事類賦

Ch'ung ting kuang shih lei fu.

An Encyclopedia of General Information. With Notes.

By 華希閔 Hua Hsi-min. 40 chüan. 1788.

[Amherst II, C 17-18.]

89. 今右奇觀

Chin ku ch'i kuan.

"Ancient and Modern Wonders." A collection of marvellous tales, translations of many of which have appeared in the *China Review*. 10 vols. 40 chüan. Ref. B.M. p. 101; Kidd, p. 52.

[Amherst II, C 19.]

90. 說鈴

Shuo Ling.

An Account of Embassies from Russia, Cochin China, Formosa, the Loo Choo Islands, and other States. 12 vols. 1796—1821. Ref. B.M. p. 184.

[Amherst I, D 1-2.]

91. 神仙通鑑

Shên hsien t'ung chien.

A General Series of Biographical Notices of Taoist Divinities. By 徐鶴 Hsü Tao, &c. 5 cases, 39 vols. 1787. Ref. B.M. p. 173.

[Amherst I, D 3—7.]

92. 前西遊記

Ch'ien hsi yu chi.

"First part of Travels in the West." 2 cases, 20 vols. 100 hui. 1696.

[Amherst I, D 8-9.]

93. 聊齋志異

Liao Chai chih i.

"Strange Stories from a Chinese Studio." 2 cases, 16 vols. 1768. Ref. B.M. p. 167; L.U. 52, 4; Kidd, p. 55. See No. 40.

[Amherst I, D 10-11.]

94. 西遊真詮

Hsi yu chên chüan.

"A Complete Narrative of Travels in the West," in search of the Sacred Books. By 邱長春 Ch'iu Ch'ang-ch'un. Illustrated. 2 cases, 20 vols. [Amherst I, D 12-13.]

95. 家寶全集

Chia pao ch'üan chi.

"A Complete Collection of Household Jewels," being a Compendium of useful domestic and social knowledge. By 石成金 Shih Ch'êng-chin. 2 cases, 32 vols. published at Yangchow. Ref. B.M. p. 182. [Amherst I, D 14-15.]

96. 天雨花

Tien yü hua.

"The Rain and Flowers of Heaven" (?). A Novel, chiefly in verse. By 陶貞懷 Ta'o Chên-yüan. 3 cases, 30 vols. 1804. Ref. B.M. p. 200. [Amherst II, D 1-3.]

97. 前紅樓夢

Ch'ien hung lou mêng.

"The Earlier Dream of the Red Chamber." 2 cases, 24 vols. 1791. [Amherst II, D 4-5.]

98. 後紅樓夢

Hou hung lou mêng.

"The Later Dream of the Red Chamber." 10 vols. 32 vols. hui. [Amherst II, D 6.]

99. 後紅樓夢

Hou hung lou mêng.

"The Later Dream of the Red Chamber." 10 vols. [Amherst II, D 7.]

100. 四書匯參

Ssū shu hui chūan.

"A Complete Set of the Four Books." 4 cases, 22 vols.
[Amherst II, D 8—11.]

101. 資治新書

Tzū chih hsin shu.

"A new work on the Laws of the Empire." By 李芑翁
Li Li-wêng. 7 vols. Ref. L.U. 118, 1.
[Amherst II, D 12.]

102. 平山冷燕

Ping shan lêng yen.

Translated by Stanislas Julien under the title of "Les deux
jeunes filles lettrées." Paris, 1860. 4 vols. 1797. Ref.
L.U. 68, 5; Wylie, p. 163. [Amherst II, D 13.]

103. 山海經

Shan hai ching.

"The Classic of the Hills and Seas." With Ko Pō's
Commentary. Edited by 吳衷珩 Wu Chung-wêng.
4 vols. 18 chūan. 1667. See No. 230. [Amherst II, D 14.]

104. 六合內外瑣言

Liu ho nei wai so yen.

"Trifles on men and things within and beyond the Six
Points"—East, West, South, North, the Zenith and the
Nadir. Kidd, p. 27. Ref. L.U. 57, 2; Kidd, p. 27.
[Amherst II, D 15-16.]

105. 神天聖書

Shên t'ien shêng shu.

The Bible. Translated into Chinese by R. Morrison
and Mr. Milne. 3 cases, 24 vols. 1823. Ref. B.M. p. 1.
[Amherst I, E 1—3.]

106. 水滸傳

Shui hu chuan.

An historical novel. By 施耐菴 Shih Nai-ngan. The scene is laid in Honan and Shantung, and relates to the time of Hui Tsung (1101—1126) of the Sung Dynasty. It is of a less martial character than the *San Kuo* and furnishes a greater insight into Chinese life in various phases. 2 cases, 20 vols. 1734. *Ref.* B.M. p. 181; Kidd, p. 13; L.U. 86, 5. See No. 120. [*Amherst* I, E 4-5.]

107. 大清摺紳全書

Ta ch'ing chin shên ch'üan shu.

A Complete Official Directory of the Empire; the "Red Book," as it is usually called. 3 cases, 12 vols. *Ref.* B.M. p. 164; Kidd, p. 33. [*Amherst* I, E 6—8.]

108. 桃花扇傳奇

T'ao hua shan chuan ch'i.

"The Story of the Peach Blossom Fan." 4 vols. *Ref.* B.M. p. 115. See No. 55. [*Amherst* I, E 9.]

109. 四書題鏡

Ssü shu t'i ching.

A Mirror of Themes from the Four Books. 10 vols. 1807. [*Amherst* I, E 10.]

110. 三國志

San kuo chih.

"The History of the Three Kingdoms," of Wei, Shu, and Wu, which flourished about the third century of the Christian era. See No. 250. [*Amherst* I, E 11-12.]

111. 本草綱目

Pên ts'ao kang mu.

The "Materia Medica" of 李時珍 Li Shih-chên. 6 cases, 44 vols. 1657. *Ref.* Wylie, p. 67; B.M. p. 129; Kidd, p. 16; L.U. 128, 3. See No. 72. [*Amherst* II, E 1—6.]

112. 尺牘類選

Ch'ih tu lei hsüan.

"The Model Letter Writer." *Ref.* B.M. p. 28.

[*Amherst* II, E 7.]

113. 花樓衍義

Hua lou yen i.

On the Broad Principles of Right and Justice, Liberality and Benevolence (?). 14 vols. 1814.

[*Amherst* II, E 8.]

114. 金石姻緣

Chin Shih yin yüan.

The Heavenly-influenced union of Chin and Shih. *Ref.* L.U. 38, 5. See No. 8.

[*Amherst* II, E 9.]

115. 詠物詩選註釋

Yung wu shih hsüan chu shih.

A Collection of Poetical Recitations, with Explanatory Notes. 4 vols. 8 chüan. 1800. *Ref.* B.M. p. 250.

[*Amherst* II, E 10.]

116. 詩韻含英題解辨同合訂

Shih yün han ying t'i chieh pien t'ung ho ting.

A Copious Tonic Dictionary of poetical expressions explained and discussed." Compiled by 甘芳谷 Kan Fang-ku. 4 vols. 1775. *Ref.* B.M. p. 93.

[*Amherst* II, E 11.]

117. 隋世錦囊全書

Ch'ou shih chin nang ch'üan shu.

"Polite Intercourse with the World." A work containing models for inscriptions over doors, eulogies on deceased relations, benedictions, congratulatory odes, family ceremonies, complimentary addresses, forms of bonds and covenants; also notices of the public roads of the Empire, sources of the lakes, on the Yang-tzu river, with other miscellaneous information of a polite and literary character. 6 vols. *Ref.* B.M. p. 220; Kidd, p. 35.

[Amherst II, E 12.]

118. 好逑傳

Hao ch'iu chuan.

"The Fortunate Union." A tale of Social Life. Translated under the above title by Sir John Davis. 4 vols. *Ref.* B.M. p. 103; Kidd, p. 53; Wylie, p. 163; Möllendorff, p. 22. See No. 125.

[Amherst II, E 13.]

119. 文帝全書

Wên Ti ch'üan shu.

The Complete Works of Wên Ti. 1 case, 8 vols. 1803. *Ref.* Kidd, p. 20; Wylie, p. 16. [Amherst II, E 14.]

120. 水滸傳

Shui hu chuan.

An Historical Novel. By 施耐菴 Shih Nai-ngan. The scene is laid in Honan and Shantung, and relates to the time of Hui Tsung (1101—1126) of the Sung Dynasty. It is of a less martial character than the *San kuo chih* and furnishes a greater insight into Chinese life in various phases. 2 cases, 20 vols. 75 chüan. 1734. *Ref.* R.M. p. 181; Kidd, p. 13; L.U. 86, 5. See No. 106.

[Amherst II, E 15-16.]

121. 粵東筆記

Yüeh tung pi chi.

Records relating to the Province of Kuang-tung. 4 vols.
Ref. Kidd, p. 11. [*Amherst* II, 17.]

122. 本草綱目

Pên ts'ao kang mu.

The "Materia Medica" of China. 4 cases, 44 chüan.
 1786. *Ref.* B.M. p. 129. See No. 72.
 [*Amherst* I, F 1—4.]

123. 十國春秋

Shih kuo ch'un ch'iu.

"The Spring and Autumn Annals (*i.e.* the history) of the
 Ten Kingdoms." 1—8 only out of 16 vols.
 [*Amherst* I, F 5.]

124. 字彙

Tzū Hui.

A Dictionary. By 梅麀祖 Mei Ying-tsu. 2 cases,
 14 vols. *Ref.* B.M. p. 155. [*Amherst* I, F 6-7.]

125. 鑑史提綱

Chien shih t'i kang.

A Collection of the most important facts in History.
 4 vols. [*Amherst* I, F 8.]

126. 好逑傳

Hao ch'iu chuan.*

"The Fortunate Union." 4 vols. *Ref.* B.M. p. 103;
 Kidd, p. 3. See No. 118. [*Amherst* I, F 9.]

* This novel has been translated into English by T. Percy, "The Pleasing History of Hao Kion," 1761. London, 4 vols. 8vo. Also in German by C. G. von Meerr, Leipzig, 1760, 8vo. French: Lyons, 1766, 4 vols. 12mo.; and Paris, 1828, 12mo. Dutch: Amsterdam, 1767, 12mo.; Bremen, 1809, 8vo. Sir J. Davis also made a translation, entitled as above.

127. 唐 宋 文 醇

T'ang Sung wên shun.

Examples of the highest class of literature of the periods of the T'ang and Sung Dynasties. 2 cases, 20 vols.
[Amherst I, F 10-11.]

128. 印 譜

Yin p'u.

An Illustrated work on Ancient and Modern Seals.
6 vols. [Amherst I, F 12.]

129. 小 學 正 文

Hsiao hsüo chêng wên.

"The correct text of the *Hsiao hsüo* (Learning for the Young)." 2 vols. [Amherst I, F 13.]

130. 法 苑 珠 林

Fa yüan chu lin.

"The Forest of the Pearls and the Garden of the Law(?)." Only 2 cases, 1-6, 19-24. Ref. B.M. p. 201.
[Amherst I, F 15-16.]

131. 通 鑑 綱 目

T'ung chien kang mu.

A General Review of History. 2 cases only, 21-30, 31-39. Ref. B.M. p. 45. See Nos. 165, 240.
[Amherst II, F 1-2.]

132. 增 補 遣 愁 集

Tsêng pu ch'ien ch'ou chi.

"A Remedy to Dispel Grief." Compiled by Chang Kuei-shêng 張貴勝. Ref. L.U. 105, 5; B.M. p. 13.
[Amherst II, F 3.]

133. 四書

Ssü shu.

The "Four Books," in Manchu and Chinese. 1756.

[Amherst II, F 4.]

134. 萬法燭宗

Wan fa kuei tsung.

"On the Doctrine of the Transmigration of Souls," or perhaps more correctly, "Of the Immortality of the Soul (?)."

This is *not* a missionary work. 5 vols. Ref. L.U. 122, 4.

[Amherst II, F 5.]

135. 算法統宗

Suan fa t'ung tsung.

"The Rules of Arithmetic," illustrating the principle of the Abacus. Ref. B.M. p. 39.

[Amherst II, F 6.]

136. 文法入門

Wên fa ju mên.

"Elements of Composition." 2 vols.

[Amherst II, F 7.]

137. 論語

The "Lun yü."

"The Confucian Analects." 2 vols. Ref. B.M. p. 193.

[Amherst II, F 8.]

138. 豆棚閒話

Tou p'êng hsien hua.

2 vols.

[Amherst II, F 9.]

139. 一夕話

Yi hsi hua.

"An Evening Talk." 4 vols.

[Amherst II, F 10.]

140. Lung yen ching lüo.

[Amherst II, F 11.]

141. 二 論 啟 幼 引 端

Èrh lun ch'i yu yin tuan.

"The Beginner's Guide to the Confucian Analects."

2 vols, 4 chüan, 1795. Ref. B.M. p. 134.

[Amherst II, F 12.]

142. 時 文 筆 譜

Shih wên pi p'u.

"Essays on Modern Literature." 2 vols, 4 chüan, 1813.

[Amherst II, F 13.]

143. 古 文 筆 譜

Ku wên pi p'u.

"Essays on Ancient Literature." [Amherst II, F 14.]

144. 本 草 集 要

Pên Ts'ao chi yao.

Summary of the most important information contained in Pên ts'ao. See No. 72. 2 cases, 13 vols.

[Amherst II, F 15-16.]

145. 道 德 經 解

Tao tê ching chieh.

The Canon of Tao, and the Exemplification thereof, with exegetical notes. See No. 202. Ref. B.M. p. 120.

[Amherst II, F 17.]

146. 數 求 聲

品 字 箋

Shu ch'iu shêng,

and P'in tzü ch'ien.

"Many appeals for preferments," and "The Records of honours conferred (?)." 4 vols. and 3 vols. in one case.

[Amherst II, F 18.]

147. 休寧縣志
Hsiu-ning hsien chih.

Topographical Records of the District of Hsiu-ning.
Ref. Biot, p. 33. [Amherst II, F 19].

148. 正字通
Chêng tzü t'ung.

A Chinese Dictionary. 3 cases, 20 vols. Ref. B.M.
p. 132. [Amherst II, F 20—22.]

149. 漢宋奇書
Han Sung ch'i shu.

Statistical and Topographical Illustrations of the two great historical novels or romantic accounts of periods during the Han and Sung Dynasties, called the 三國志 San kuo chih (see No. 110) and the 水滸傳 Shui hu-chuan (see No. 106). 2 cases, 20 vols. [Amherst I, G 1-2.]

150. 麟世錦囊全書
Ch'ou shih chin nang ch'üan shu.

A Treasury of Information on social etiquette. By 鄒景揚 Tsou Ching-yang. 1 case, 7 vols. Ref. B.M. p. 220; Kidd, p. 35. [Amherst I, G 3.]

151. 水滸傳
Shui hu chuan.

3 cases, 20 volumes. Ref. B.M. p. 181; L.U. 86, 5; Kidd, p. 13. See No. 106. [Amherst I, G 4—6.]

152. 感應篇
Kan ying p'ien.

"The Book of Rewards and Punishments." Ref. Wylie, p. 179. 2 vols. [Amherst I, G 7.]

* *Kan ying p'ien*. This work, which belongs to the debased Taoism of later ages, has been translated by S. Julien under the title of "*Le livre des Recompenses et des Peines*," Paris, 1835, 8vo. See also, for English translation, "*Doolittle's Vocabulary*," vol. ii.; also A. Remusat, "*Le Livres des Recompenses et des Peines*," Paris, 1816.

153. 大清摺紳全書

Ta Ch'ing chin shên ch'üan shu.

A Complete official Directory for the Empire. Four Directories, each 4 vols., come under this slip. 4 vols. *Ref.* B.M. p. 164. [*Amherst* I, G 8.]

154. 唐人說薈

T'ang jen shuo wei.

"The Herbal Expositor of the period of the T'ang 唐 Dynasty," (A.D. 618, 905). 4 cases, 32 vols. *Ref.* Kidd, p. 16. [*Amherst* II, G 1—4.]

155. 今古奇觀

Chin ku ch'i kuan.

Wondrous Tales of Ancient and Modern Times. By 覺世 Chüo Shih. See No. 89. *Ref.* B.M. p. 101; Kidd, p. 52. [*Amherst* II, G 5.]

156. 駁案新編

Pö ngan hsin pien.

"Judgments reversed." A new edition of cases which have been brought before the High Court of Justice for Revision of Judgment. 4 cases, 32 vols. 1736. [*Amherst* I, H 1—4.]

157. 繹白裘

Chui pö ch'iu.

A collection of Plays. *Ref.* B.M. p. 39. [*Amherst* I, H 5—10.]

158. 大清律例

Ta ch'ing lü li.

The Laws of the Imperial Tartar Dynasty—the Penal Code of China. 2 cases. Translated by Sir George Staunton. [*Amherst* II, H 1-2.]

159. Chi hsin lei pao.

14 vols.

[Amherst II, H 3-4.]

160. 四庫全書

Ssū k'u ch'üan shu.

A Catalogue of the Imperial Library. A great national collection of books, published in the 39th year of Ch'ien Lung (or Kien Long). 8 vols. 1774. Ref. Kidd, p. 29.

[Amherst II, H 5.]

161. 積古齋鐘鼎器款識

Chi ku ch'i chung ting ch'i k'uan shih.

A work on ancient Bells, Tripods, &c.

[Amherst I, J 2.]

162. 嶺南叢述

Ling nan ts'ung shu.

An Account of the Provinces of Kuang-tung and Kuang-hsi. By 登淳 Têng Shun. 18 vols. 60 chüan. 1830. Ref. B.M. p. 199.

[Amherst I, J 3-4.]

163. 春秋註

Chun Tsew choo.

The "Spring and Autumn" or History of the State of Lu. By Confucius. With commentary. 1790.

[Amherst I, J 5.]

164. 鐘鼎彝器款識*

Chung ting i ch'i k'uan shih.

Facsimiles of Inscriptions on Bells, Tripods, Vases, &c., of Successive Ages, transcribed and explained. By 葉尙功 Shé Shang-kung of the Sung Dynasty. 4 vols. 20 chüan. 1797. Ref. B.M. p. 172.

[Amherst I, J 7.]

* Translated by Gaubil, revised and corrected by M. de Guignes, Paris, 1770, 4to.

165. 通鑑綱目

T'ung chien kang mu.

2 cases only, 1—8, 19—24. See No. 131.

[Amherst I, J 8-9.]

166. 御製曆象考成

Yü chih li hsiang k'ao ch'êng.

Buddhism. "Successive Transformations accomplished."
A Buddhistic work, published under Imperial authority.
16 vols. 16 chüan. No date. Ref. Kidd, p. 47.

[China I, A 1.]

167. 孔子家語

K'ung tzŭ chia yü.

"The Family Sayings of Confucius." These "Sayings"
are not authentic. An attempt to translate the work was
made some years ago in the *Chinese Recorder*.

[China I, A 2.]

168. 佛頂五錄總目

Fó ting wu lu tsung mu.

Buddhism. Six vols., comprising the

枝錄 chih lu, 1 vol. 宗錄 tsung lu, 1 vol.

宗鈔 mêng ch'ao, 4 vols.

A Buddhistic work, with plates, representing the me-
tempsychosis. Ref. Kidd, p. 47. [China I, A 3-4.]

169. 陔餘叢考

Kai yü ts'ung k'ao.

12 vols. 43 chüan (1st vol. missing). [China I, A 5.]

170. 霞客遊記

Hsia k'ê yü chi.

"The Travels of Hsü Hsia-k'ê." 徐霞客. 16 vols. 1703.
Ref. B.M. p. 174; Kidd, p. 56. [China I, A 6.]

171. 三教搜神

San chiao sou shên.

Religion. The Three Sects.

The 三教源流聖帝佛師搜神記

"San chiao yüan liu shêng ti fô shih sou shên chi,"

is the full title of the "History of the founders of the Three Sects—Confucianism, Buddhism, Taoism, and other Saints and Sages." 1819. [China I, A 7.]

172. 人生必讀

Jen shêng pi tu.

"The moral obligations of life." 2 vols. 2 chüan. 1786.
[China I, A 8.]

173. 聖本禮記

Chien pên li chi.

The "Book of Rites" revised. 10 vols. 30 chüan.
1781. Ref. B.M. p. 121; I.O.C. p. 18. (10 chüan).
[China I, A 9.]

174. 易經

Yi ching.

"The Book of Changes." 2 chüan. 1681.
[China I, A 10.]

175. 皇明制書

Huang Ming chih shu.

The Imperial Ming dynasty's book of National Regulations. 12 vols. 14 chüan. 1375.
[China I, A 11.]

176. 書經

Shu ching.

The Book of History. One of the Five Classics. Ref.
Wylie, Notes, 2. See No. 263. [China II, A 1.]

177. 新 遺 詔 書

Hsin I Chao Shu.

The New Testament. Translated by Dr. Robert Morrison. Also the Epistles, with the Apocalypse, in a thin separate volume. 8 vols. 8vo. 1813. *Ref.* B.M. p. 158; I.O.C. p. 56; Kidd, p. 49. [China II, A 2.]

178. 羣 芳 譜

Ch'ün fang p'u.

A "Herbarium," by 王象晉 Wang Hsiang-chin. Edited by 毛鳳苞 Mao Fêng-pao, and others. 18 vols. [China II, A 3-4.]

179. 藥 氏 醫 按

Shê shih I ngan.

A collection of medical cases by Shê Shih. This is an abridgment and commentary by Shê Shih of a work published about the year 1287 by Ch'ên Tzū-ming 陳自明 called 婦人大全良方 Fu jen ta ch'üan liang fang. It principally relates to female complaints. Each article is followed by prescriptions suitable to the ailment in question. *Ref.* Wylie, p. 79; Kidd, p. 42. 32 vols. in 4 cases. [China II, A 5-8.]

180. 上 下 論 上 下 孟

Shang hsia lun; Shang hsia méng.

Part of the "Four Books," namely the Lun yü, or Analects of Confucius, and the books of Mencius. [China II, A 9.]

181. 幼 學 句 解

The "Yu Hsiü (須知 hsiü chih) Chü Chieh."

"General knowledge necessary for beginners," with explanations, in 4 chüan. (2nd chüan missing). 1790. *Ref.* B.M. p. 40. [China II, A 10.]

182. 詩韻珠璣

Shih yün chu chi.

"A Treasury of Rhymes," by 余照 Yü Chao. 5 vols. 5 chüan. 1801. *Ref.* B.M. p. 264; Kidd, p. 15.

[China II, A 11.]

183. 番禺縣志

P'an-yü hsien chih.

"A Topography of the district city of P'an-yü, in the province of Kuangtung. It is really the port of Canton, where foreign vessels anchor. 12 vols. in two cases. 1st vol. with Index and Illustrations missing. *Ref.* Kidd, p. 10.

[China II, A 12-13.]

184. 大清律例

Ta Ch'ing lü li.

"The fundamental laws and subordinate statutes of the Ch'ing Dynasty," 24 vols. in 4 cases. 1646. *Ref.* B.M. p. 218; (1768), I.O.C. p. 58.

[China III, A 1-3.]

185. 紅雪樓九種曲

Hung hsüeh lou chiu ch'ung ch'ü.

"The nine plays of the red snow tower." 10 vols. These "plays" or popular stories are as follows:—

- | | | |
|---|-----|--------------------------|
| 1 | 香祖樓 | Hsiang tsu lo, 2 vols. |
| 2 | 空谷香 | K'ung ku hsiang, 2 vols. |
| 3 | 桂林霜 | Kuei lin hsiang, 1 vol. |
| 4 | 一片石 | Yi p'ien shih, 1 vol. |
| 5 | 第二碑 | Ti êrh pei, 1 vol. |
| 6 | 冬青樹 | Tung ch'ing shu, 1 vol. |
| 7 | 臨川夢 | Lin ch'uan mêng, 1 vol. |
| 8 | 雪中人 | Hsüeh chung jen, } |
| 9 | 四絃秋 | Ssü hsien ch'iu, } |

1 vol.

1774.

[China III, A 4.]

186. 清文彙書

Ch'ing wên hui shu.

A Manchu-Chinese dictionary. 12 vols. 12 chüan. 1750.

[China III, A 5.]

187. 笠翁十種曲

Li wêng shih chung ch'ü.

Ten Plays, compiled by Li Wêng. 18 vols. *Ref.* B.M. p. 133; Kidd, p. 15; L.U. 55, 2. [*China* III, A 6.]

188. 韻雅

Yün Ya.

A Dictionary arranged according to the Tones. 5 vols. *Ref.* Kidd, p. 2. [*China* III, A 7.]

189. 四書

Ssü shu.

18 vols. [*China* III, A 8—10.]

190. 臨證指南醫按

Lin chêng chih nan i ngan.

A correct Medical Guide, founded on extensive practice. 1769. *Ref.* Kidd, p. 43. [*China* I, B 1-2.]

191. 廣東通志

Kuang-tung t'ung che.

A Topographical Account of the Province of Kwangtung. 5 cases, 36 vols. *Ref.* B.M. p. 268; L.U. 48, 4. [*China* I, B 3—7.]

192. 全本禮記體註

Ch'üan pên Li Ki t'i chu.

The Book of Rites, with a collection of Comments compiled by Chin Hao. 10 chüan. 1766. *Ref.* B.M. p. 121; I.O.C. p. 19. [*China* I, B 8.]

193. 拍案驚奇

P'ö ngan ching ch'i.

10 vols. 36 chüan. [*China* I, B 9.]

194. 廣輿記

Kuang yü chi.

A complete Geography of the Empire of China, originally compiled by 陸應陽 Lu Ying-yang during the Ming dynasty. Reproduced under the Emperor K'ang Hsi (1662—1722) by 祭方炳 Ts'ai Fang-ping. 13 vols. 24 chüan. 1686. *Ref.* B.M. p. 148; I.O.C. p. 53; Wylie, p. 48.

[China II, B 1.]

195. 試賦歷則

Shih fu li tsê.

4 vols. 1779.

[China II, B 2.]

196. 時文脩法

Shih wên pei fa.

6 vols. 1809.

[China II, B 3.]

197. 禪真逸史

Ch'an chên yi shih.

12 vols. 40 hui.

[China II, B 4.]

198. 古文評註

Ku wên p'ing chu.

Specimens of Ancient Authors, with commentary and notes. 10 vols. 1786.

[China II, B 5.]

199. 音漢清文鑑

Yin han ch'ing wên chien.

1 vol. 5 chüan. 1735.

[China II, B 6.]

200. 古文評註

Ku wên p'ing chu.

10 vols. 1785. See No. 198.

[China II, B 7.]

201. 明文少題

Ming wên shao t'i.

4 vols. 1731.

[China II, B 8.]

202. 道德經

Tao tê ching.

The Canon of Tao and the Exemplification thereof. Has been translated into French, English and German, by Julien, Chalmers, (1) von Strauss and (2) Plaenckner, respectively. 2 vols. No date. *Ref.* Kidd, 21; B.M. p. 119.

[China II, B 9.]

203. 金鑑外科

Chin chien wai k'ö.

The Golden Mirror of Medicine for the cure of external complaints. By Wu Ch'ien 吳謙. Published by Imperial Order. 10 vols. 16 chüan. 1742. *Ref.* B.M. p. 348. L.U. 37, 2.

[China II, B 10.]

204. 快心三編

K'uai hsin san pien.

Three pleasant Stories. 6 chüan. *Ref.* B.M. p. 185; L.U. 45, 3.

[China II, B 11.]

205. 禮記

Li Chi.

"The Book of Rites." Full title is the 全本禮記體註 Ch'üan pên Li Chi t'i chu. There is a collection of comments compiled by Ch'ên Hao 陳澧. Edited by Fan Tzu têng 范紫登 and others. 10 chüan. 1765. *Ref.* B.M. p. 121; I.O.C. p. 19. Translation by Dr. Legge will be found among *The Sacred Books of the East*.

[China II, B 12.]

206. 泉志

Ch'üan chih.

"A History of Coinage" from the earliest times to the middle of the tenth century. This copy is *manuscript*. No date. *Ref.* B.M. p. 83; Kidd, p. 32. [China III, B 1.]

207. 快心編

K'uai hsin pien.

"A Merry Tale." 7 vols. No date. *Ref.* B.M. p. 185; L.U. 45, 3.

[China III, B 2.]

208. 色戒錄

Sê chieh lu.

"The Art of Continence." 1 vol. No date. *Ref. Kidd*,
p. 20. [China III, B 3.]

209. 天崇欣賞

Tien tsung hsin shang.

5 vols. 1778.

[China III, B 4.]

210. 詞學全書

Tz'ü hsiö ch'üan shu.

7 vols. 1746.

[China III, B 5.]

211. 昭明文選

Chao ming wên hsüan.

Choice Literary Essays. Vols. 9—16 inclusive. Chüan
27—60 inclusive. [China III, B 6.]

212. 清文彙書

Ch'ing wên hui shu.

A Manchu-Chinese Dictionary. 12 vols. 1806.

[China III, B 7.]

213. 花鏡

Hua ching.

3 vols. 6 chüan. 1688.

[China III, B 8.]

214. 女仙外史

Nü hsien wai shih.

"Legends of Nymphs." 20 vols. 100 hui. *Ref. B.M.*
p. 133; L.U. 64, 4. [China III, B 9-10.]

215. 粵中見聞

Yüeh chung chien wên.

"A Descriptive Account of Canton." The work is also
called 說粵新書 Shuo Yüeh hsin shu. 5 vols. 1801.
[China III, B 11.]

216. 幼 粵 故 事

Yu hsüò ku shih.

"First Lessons in Ancient History." 4 vols. 4 chüan.
1796. See No. 181. [China III, B 12.]

217. 離 騷 經

Li sao ching.*

"Sinking into Grief." A poem in justification of the author's public character. By Ch'ü Yüan 屈原. 2 vols. 4 chüan. Ref. B.M. p. 102; Wylie's Notes, p. 181; Mölendorff, p. 20. [China III, B 13.]

218. 琵琶記

P'i pa chi.

"The Story of a Lute." A Novel, with illustrations. Ref. B.M. p. 163. [China III, B 14.]

219. 戶 部 則 例

Hu pu tsê li.

"Regulations of the Board of Revenue." 6 vols. 31 chüan. 1746. Ref. B.M. p. 34; Kidd, p. 38. [China III, B 15.]

220. 法 界 安 立 圖

Fa chieh ngan li t'u.

The Buddhist Kosmos, with illustrations, compiled by the priest 仁潮 Jen Ch'ao. 1679. Ref. B.M. p. 92; L.U. 13, 4. [China III, B 16.]

221. 故 事 尋 源

Ku shih hsin yüan.

[China I, C 1.]

222. 歷 代 名 賢 列 女 氏 姓 譜

Li tai ming hsien lieh nü shih hsing p'u.

A Biographical Account of successive generations of illustrious and virtuous women. 16 cases, 120 vols. 157 chüan. 1792. [China I, C 2—9, to II, C 1—8.]

* *Li Sao*. Translated and published, with the original text in French, by the Marquis Hervey de Saint Denys, Paris, 1870, 8vo.

223. 高厚蒙求
Kao hou mêng ch'iu.

A collection of important articles relating to Astronomical Science. The author, who is a Chinese mathematical instrument maker, admits his obligations to the works of Europeans, which have been published in Chinese by imperial authority. By 徐朝俊 Hsü Chao-chün. 4 vols. 1807. *Ref.* B.M. p. 173; Wylie, p. 99; Kidd, p. 30; L.U. 30, 2.

[China II, C 9.]

224. 傷寒辨證錄
Shang han pien chêng lu.

Records of The Symptoms of Fever occasioned by checked perspiration. A medical work on colds. 14 vols. 14 chüan. 1748.

[China II, C 10-11.]

225. 幼學故事瓊林
Yu hsüo ku shih ch'ung lin.

A comprehensive account of matters relating to Antiquity, for the use of young people. By 程允升 Chêng Yün-shêng. 2 vols. 4 chüan. 1796. *Ref.* B.M. p. 40; L.U. 89, 3.

[China II, C 12.]

226. 一統志
Yi tung chih.

A Geographical and Statistical Account of the Empire of China. By Imperial Commission. Comprises:—1. Situation and boundaries of provinces. 2. Climate. 3. Historical notices. 4. Notable objects of a natural kind. 5. Customs and dispositions of people. 6. Cities, canals and celebrated buildings. 7. Schools and libraries. 8. Population. 9. Area. 10. Government officials. 11. Mountains and rivers. 12. Antiquities. 13. Fortresses and passes. 14. Bridges. 15. Dams. 16. Various monuments. 17. Confucian temples. 18. Taoist and Buddhist temples. 19. Eminent statesmen. 20. Famous persons. 21. Hermits. 22. Natural and artificial products. *Ref.* B.M. p. 21; I.O.C. p. 68; L.U. 131, 3.

[China III, C 1-4.]

227. 兵垣四編**Ping yüan ssü pien.**

"On the Art of Fortification." Stopped and emphasized in red, with printed red marginal commentaries and explanations. 5 vols. 1621. *Ref.* Kidd, p. 58.

[*China* III, C 5.]**228. 南漢春秋****Nan han chu'n ch'iu.**

The "Spring and Autumn Annals" (*i.e.* History) of the Southern Han dynasty.

[*China* III, C 6.]**229. 廈門志****Hsia mên chih.**

"A Topography of Amoy." 1, 2. Topography. 2, 3. Civil and Military Government. 5. Shipping. 6. Inter-course with Formosa. 7. Customs and land revenues, &c. 8. Foreign marts. 9. Literature, Inscriptions. 10. A list of incumbents of office. 11. A list of literary graduates. 12, 13, 14. Biographical notices. 15. Manners and customs. 16. Antiquities. 16 sections. 1832. *Ref.* B.M. p. 50.

[*China* III, C 7.]**230. 山海經****Shan Hai Ching.**

4 vols. See No. 103.

[*China* III, C 8—11.]**231. 大清會典****Ta Ch'ing hui tien.**

A Comprehensive description of the System of Government under the Ch'ing Dynasty (A.D. 1640—to date), being a Collection of the Laws, Statutes and Bye Laws of the Chinese Empire under the Tartar Dynasty. 20 cases, 121 vols. 180 chüan. 1747. *Ref.* B.M. p. 217; Kidd, p. 36; L.U. 40, 2. (100 chüan. 1764). I.O.C. p. 58.

[*China* I, D 1—11, to II D 1—9.]

232. 祿批諭旨

Chu p'i yü chih.

"Imperial Rescripts declaring the Sovereign Will."
 Imperfect: 1 case contains vols. 43—48 incl., and 1 case
 vols. 107—112 incl. [China II, D 10-11.]

233. 左繡

Tso hsiu.

Imperfect. Only 1 case, vols. 1—7. 7 vols. missing.
 1720. [China II, D 12.]

234. 大清會典

Ta Ch'ing hui tien.

Vols. 19—24 only. See No. 230. [China II, D 13.]

235. 藝文備覽

I wên pei lan.

An excellent Dictionary arranged according to the Primi-
 tives. Its Author, Sha Muh, was 30 years in completing
 it. 6 cases. 1798. Ref. B.M. p. 325; L.U. 13, 3.

[China III, D 1—6.]

236. 醫宗金鑑

I tsung chin chien.

"The Golden Mirror of Medicine." A celebrated Treatise
 on Medical Science. It was compiled by 100 persons con-
 nected with the Imperial College of Physicians at Peking.
 All existing Treatises procurable in print or in manuscript
 were collected by order of the Government in aid of the
 design. The work was completed in four years. 5 cases,
 40 vols. 1739.

[China III, D 7—11.]

237. 欽定禮記義疏

Ch'in ting li chi i su.

"The meaning of the Book of Rites," with explanations.
 Imperfect. Only vols. 19—25 incl. See No. 205. Ref.
 B.M. p. 121.

[China I, E 1.]

238. 行水金鑑圖

Hsing shui chin chien t'u.

A Description of the Rise, Courses, Productions, &c., of the Celebrated Rivers of China, together with an account of the Grand Canal. 4 cases, 40 vols. 175 chüan. 1726. *Ref.* Kidd, p. 12. [*China I, E 2—5.*]

239. 神仙通鑑

Shên hsien t'ung chien.

"A History of the Gods." 2 cases, 12 vols.

[*China I, E 6-7.*]

240. 通鑑綱目

T'ung chien kang mu.

"A Condensation of the Mirror of History." By 朱熹 Chu Hsi and his disciples. 8 cases, 67 vols. 1803. *Ref.* B.M. p. 46; I.O.C. p. 61; Kidd, p. 8. See No. 165.

[*China II, E 1—8.*]

241. 適情雅趣

Shih ch'ing ya ch'u.

5 vols. 10 chüan.

[*China II, E 9.*]

242. 史記

Shih chi.

"The Historical Record." By 司馬遷 Ssü-ma Ch'ien. With a Commentary by 徐孚遠 Hsü Fu-yüan and 陳子龍 Ch'ên Tzŭ-lung. 24 vols. 130 chüan. 1806. *Ref.* B.M. p. 194; Kidd, p. 8.

[*China III, E 1—4.*]

243. 史記

Shih chi.

"The Historical Record." By 司馬遷 Ssü-ma Ch'ien. 3 cases, 22 vols. 130 chüan. *Ref.* B.M. p. 194; Kidd, p. 8.

[*China III, E 5—7.*]

244. 類經

Lei ching.

"Class Classics," being a compilation of the texts of two ancient medical works. 3 cases, 15 vols. 32 chüan.

[China III, E 8—10.]

245. 紅樓夢

Hung lou mêng.

"The Dream of the Red Chamber." By 曹雪芹 Ts'ao Hsüeh-ch'in. 8 vols. 8 chüan. 1835. *Ref.* L.U. 24, 4-5; Kidd, p. 51. See No. 88.

[China III, E 11.]

246. 四書

Ssü shu.

The "Four Books." See No. 100. [China I, F 1.]

247. 本草綱目

Pên ts'ao kang muh.

See Nos. 72, 111.

[China I, F 2—5.]

248. 丘錄

Ping Lu.

An Encyclopædia of matters connected with military affairs. Manuscript. 4 cases, 30 vols. 14 chüan. *Ref.* B.M. p. 204.

[China I, F 6—9.]

249. 佛門定制

Fō mên ting chih.

"The established laws and formularies of the disciples of Buddha." Compiled by 詹承詒 Chan Ch'êng-Kao. *Ref.* B.M. p. 22; L.U. p. 16, 5.

[China I, F 10.]

250. 三國志

San kuo chih.

"The History of the Three Kingdoms." A romance founded on the Civil Wars of China during the 2nd and 3rd centuries. By 羅貫中 Lo Kuan-chung. 20 vols. 120 hui. 1644. *Ref.* B.M. p. 142; I.O.C. p. 54. See No. 110.

[China II, F 1-2.]

251. 四書直解

Ssü shu chih chieh.

The "Four Books," clearly explained. 1765. *Ref.* B.M. p. 192. See Nos. 100, 245. [*China* II, F 3.]

252. 旁訓詩經體註衍義

P'ang hsün shih ching t'i chu yen i.

The Book of Odes, with Comments and Copious Interpretations. 4 vols. 8 chüan. 1687. *Ref.* B.M. p. 180. [*China* II, F 5.]

253. 正字通

Chêng tzü t'ung.

A Dictionary arranged according to the Primitives. The Preface to this edition is in Manchu-Chinese. 4 cases, 23 vols. 1672. *Ref.* B.M. p. 132; Kidd, p. 4; L.U. 5, 2. [*China* II, F 6—9.]

254. 監本詩經

Chien pên shih ching.

The original text of the Book of Odes. 4 vols. 1818. *Ref.* B.M. p. 180. [*China* II, F 10.]

255. 聖書

Shêng shu.

A Commentary on the Epistle to the Ephesians. By William Milne, D.D. 2 vols. (in Chinese). Malacca. 1825. *Ref.* Kidd, p. 50. 1825. [*China* II, F 11.]

256. Part of the "Four Books," containing:

大學疏義 Ta hsüo su i, 1 vol.

論語考證 Lun yü k'ao chêng, 2 vols.

孟子考證 Mêng tzu k'ao chêng, 1 vol.

1811. See No. 251.

[*China* II, F 12.]

257. 三國志

San Kuo chih.

The History of the Three Kingdoms of Wei, Shu and Wu. An Historical Romance. See II, F 1-2. 2 cases, 20 volumes (second vol. missing). 1644. See II, F 1-2. See Nos. 111, 250. [China II, F 13-14.]

258. 四書註

Ssü shu chu.

The "Four Books," with Commentary. See Nos. 101, 246, &c. [China II, F 15.]

259. 皇清職貢圖

Huang ching chih kung t'u.

Tributary offerings rendered to the Imperial Ch'ing Dynasty. 9 vols. 1751. [China III, F 1.]

260. 楞嚴正脉

Lêng yen chêng mō.

"The true meaning of the Lêng yen sutra." 6 vols. Ref. B.M. p. 161. [China III, F 2.]

261. 補詳字義

Pu hsiang tzü i.

4 vols. 14 pēn. [China III, F 3.]

262. 古文尙書

Ku wên shang shoo.

On the Ancient Text of the Book of Historical Documents. 6 vols. 13 chüan. By 惠棟 Hui Tung. This copy is a Japano-Chinese publication, being printed with Japanese tone marks. It belonged to M. Titsingh, the Dutch writer whose autograph it bears, and is called by him So-so-Kotzu. Ref. B.M. p. 90; Kidd, p. 7. [China III, F 4.]

263. 書經體註

Shu ching t'i chu.

The Book of Historical Documents, with Comments.
4 vols. 1760. *Ref.* B.M. 114; Kidd, p. 7.

[China III, F 5.]

264. 西樵遊覽記

Hsi ch'iao yu lan chi.

4 vols. 14 chüan. 1790.

[China III, F 6.]

265. 刑部則例

Hsing Pu Tsê Li.

"The Regulations of the Board of Punishments." 1680.
Ref. B.M. p. 34; Kidd, p. 37.

[China III, F 7.]

266. 色戒全錄

Sê chieh ch'üan lu.

The Art of Continence. 2 vols. 1696.

[China III, F 8.]

267. 傷寒三書合璧

Shang han san shu ho pi.

"A Treatise on Diseases arising from Colds." In three parts, consisting of four volumes. The title "Shang Han," injured by cold, comprehends all diseases produced by checked perspirations, especially fevers, exposure to marsh, miasmata, damp air, or cold. 4 vols. 1788. *Ref.* Kidd, p. 41; Wylie, pp. 82-3.

[China III, F 9.]

268. 家寶全集

Chia pao ch'üan chi.

"A complete collection of Household Gems." Being a work containing precepts on personal and social behaviour, together with instructions of a miscellaneous nature suited to families. 4 cases, 30 vols. 1708. *Ref.* B.M. p. 182; Kidd, p. 23; L.U. 31, 5.

[China III, F 10-13]

269. 羊城右鈔

Yang ch'êng ku ch'ao.

"Ancient Records of the City of Rams," i.e. Canton.
Compiled by 仇池石 Ch'iu Shih-shih. 5 vols. 8 chüan.
1806. Ref. B.M. p. 103. [China III, F 14.]

270. 四書合講

Ssü Shu ho Chiang.

The Four Books harmoniously explained, according to the
Commentary of Chu Hsi 朱熹. With a Paraphrase. 4 vols.
1805. Ref. B.M. p. 192; Kidd, p. 18. See Nos. 101,
245, &c. [China I, G 1.]

271. 四書合講

Ssü Shu ho Chiang.

5 vols. 1730. [China I, G 2.]

272. 通鑑綱目

T'ung chien kang mu.

See No. 132, &c. [China I, G 3—5.]

273. 萬壽衢歌樂章

Wan shou ch'ü ko yō chang.

Pieces of Music and Songs sung in the streets on Imperial
Birthdays (Kidd). 6 vols. 1790. Ref. Kidd, p. 14.
[China I, G 6.]

274. 丘文莊公集

Ch'iu wên chuang kung chi.

5 vols. 10 chüan. 1708. [China I, G 7.]

275. 春秋傳說

Ch'un ch'iu chuan shuo.

3 cases, 19 vols. 38 chüan. 1722.
[China I, G 8—10.]

276. 通鑑綱目

T'ung Chien Kang Mu.

"A Condensation of the Mirror of History." By 朱熹
Chu Hsi and his disciples. 4 cases, 34 vols.

[China II, G 1—4.]

277. 欽定書經傳說彙纂

Chin ting Shu Ching chuan shuo hui tsuan.

"The Book of Historical Documents, with a Compilation
and Digest of Comments and Remarks thereon." Compiled
by Imperial Commission, with a preface by the Emperor.
Ref. B.M. p. 113.

[China II, G 5-6.]

278. 監本詩經

Chien pên shih ching.

"The original text of the Book of Odes." 1818. *Ref.*
B.M. p. 180.

[China II, G 7.]

279. 康熙古文全集

K'ang Hsi ku wên ch'üan chi.

K'ang Hsi's Complete Collections of Ancient Literature.
3 cases, 28 vols. 1675.

[China II, G 8—10.]

280. 監本春秋

Chien pên ch'un ch'iu.

"The original text of the Spring and Autumn Annals."

The full title is 芥子園重訂監本春秋 Chieh tzū yüan
ch'ung ting chien pên ch'un ch'iu. The Chieh tzū yüan
edition of "The Spring and Autumn Annals." 1790. *Ref.*
B.M. p. 113.

[China III, G 1.]

281. 字彙

Tzū Hui.

A Dictionary arranged according to the Primitives. By 韓葵 Han T'an. 14 vols. 1705. *Ref.* B.M. p. 72; Kidd, p. 1. [China III, G 4-5.]

282. 康熙字典

K'ang Hsi Tzū Tien.

4 cases, 32 vols.

[China III, G 6-9.]

283. 詩經體註

Shih Ching t'i chu.

"The Book of Odes," with a body of comments, including the commentary of Chu Hsi. 4 vols. 1687. *Ref.* B.M. p. 180. [China III, G 12.]

284. 篆字彙

Chuan tzū hui.

"A Dictionary of the 'Seal' Character." This form of the character dates from about B.C. 800. (Kidd). 6 vols. 1691. *Ref.* B.M. p. 155. [Elgin I, A 1.]

285. 天文曆理

Tien wén li li.

A complete work on Astronomy. By 徐發 Hsū Fa. 6 vols. 8 p'een. *Ref.* L.U. 105, 2. [Elgin I, A 2.]

286. 經世緒言

Ching shih hsü yen.

"Heedful words addressed to mortal men." 1831.

[Elgin I, A 3.]

287. 瓊州府志

Ch'iung Chou Fu Chih.

A Topographical account of the City and Department of Ch'iung Chou, the capital of the Island of Hainan. 1774.
2 cases, 16 vols. 9 chüan. [Elgin I, A 4-5.]

288. 醫林指月

I lin chih yüeh.

A medical work issued by the College of Physicians on the best methods of preserving health during the year.
2 cases, 15 vols. (1st vol. missing). *Ref.* Kidd, p. 43.
[Elgin I, A 6-7.]

289. 羅浮山志

Lō fou shan chih.

An illustrated Topography of the Lō-fou hill in the Province of Kwang-tung. 2 cases, 14 vols. This hill, or rather mountain—for it is very lofty and difficult of access—is thickly covered with Buddhist monasteries. *Ref.* B.M. p. 191; L.U. 56, 5.
[Elgin I, A 8-9.]

290. 適情雅趣

Shih ch'ing ya ch'ü.

"Happy Thoughts to promote pleasure and amusement."
[Elgin I, A 10.]

291. 靈樞經

Ling shu ching.

A medical work which treats of internal maladies and the practice of Acupuncture. It is not actually known to have appeared earlier than the eleventh century, and it is thought to be the production of 王冰 Wang Ping, in the eighth century, but is probable that it contains a great part of a more ancient work of a similar character. 6 vols. 9 chüan.
Ref. Kidd, p. 40; Wylie, p. 78. [Elgin I, A 11.]

292. 朱子全書

Chu Tzū ch'üan shu.

The complete works of Chu Hsi 朱熹, the famous commentator of the Sung dynasty, and founder of the modern school of Confucian exegesis. Compiled under the direction of the Emperor K'ang Hsi. 4 cases, 28 vols. 1714. *Ref.* B.M. p. 45; I.O.C. p. 49; L.U. 6, 1.

[*Elgin* II, A 1—4.]

293. 古文辭類纂

Ku wên tz'ü lei tsuan.

A classified compendium of ancient styles of literary composition. 2 cases, 14 vols. [*Elgin* II, A 5-6.]

294. 雍正上諭

Yung Chêng shang yü.

"Imperial Edicts." Issued during the first seven years of the Emperor Yung Chêng (A.D. 1723—36). 24 vols. 4 cases. 1729. *Ref.* B.M. p. 270. [*Elgin* II, A 7—10]

295. 素問

Su wên.

This work, and the *Ling shu ching* (see *ante*, No. 291), are considered to be the most ancient medical treatises in China. The *Su Wên* is said to embody the results of certain consultations between the author of the *Ling shu ching* and Huang Ti, or the Yellow Emperor, and, as well as the *Ling shu ching*, to recognise the doctrine of the circulation of the blood. But there can be no doubt that its real date is many centuries later than the semi-mythological period to which it has been too enthusiastically assigned. 6 vols. 9 chüan. *Ref.* Kidd, p. 41.

[*Elgin* II, A 11.]

296. 太玄別訓

T'ai hsüan pieh hsün.

Principles relating to the origin of the Universe stated and discussed, together with figures explanatory of the system. 5 vols. 1745. *Ref.* B.M. p. 251; Kidd, p. 25.

[*Elgin II, A 12.*]

297. 武夷山志

Wu I shan chih.

A Topographical account of the Wu I Hills. These are the hills on the western frontiers of the Fokien province, whence comes the celebrated "Bohea" tea, that word being a corruption of "Wu I." 5 vols. 24 chüan. 1682. *Ref.* B.M. p. 250.

[*Elgin II, A 13.*]

298. 淵鑑類函

Yüan chien lei han.

An Encyclopædia of Universal Knowledge. Published by Imperial authority during the reign of the Emperor K'ang Hsi. A most valuable work, replete with information on all subjects. It is arranged under categories—Heaven, Earth, Man, Buddhism, Taoism, Animals, Birds, etc. etc. 20 cases, 153 vols. 450 chüan. 1710. *Ref.* B.M. p. 11; I.O.C. p. 11; L.U. 137, 1; Wylie, p. 150.

[*Elgin I, B 1 to 11, B 10.*]

299. 西洋記

Hsi yang chi.

"Records of the Western Ocean." An account of maritime countries and islands stretching westward from China. Illustrated throughout. 2 cases, 20 vols. 20 chüan, 100 hui. 1579. *Ref.* B.M. p. 143; Kidd, p. 8; Wylie, p. 163; L.U. 73, 5.

[*Elgin II, B 11-12.*]

300. 搜神記

Sou shên chí.

"Handbook of Mythology." By 干寶 Kan Pao of the Chin dynasty. See No. 410. *Ref.* B.M. p. 94.

[*Elgin* II, B 13.]

301. 條例約編

T'iao li yǒ pien.

A general compilation of laws and regulations, imperial declarations, ordinances, instructions, &c. Fifty-four pages are missing from 1st vol., so that the date cannot be ascertained, but it must be circa 1830. 8 cases, 81 vols. *Ref.* B.M. pp. 33-4; Kidd, p. 38.

[*Elgin* I, C 1-8.]

302. 性理大全

Hsing li ta ch'üan.

A complete work on Mental Philosophy. A compilation of the works of many scholars, with a preface by the Emperor Yung Lō (1403-1425). The present copy is wanting the preface and introduction. 2 cases, 20 vols. 70 chüan. 1597. *Ref.* B.M. p. 80; L.U. 89, 5; Kidd, p. 27; Wylie, p. 69.

[*Elgin* I, C 9-10.]

303. 四書人物備考

Ssü shu jen wu pei k'ao.

An examination of the men and things mentioned in the "Four Books." By 蔣應旂 Hsieh Ying-ch'i, with notes. *Ref.* B.M. p. 172.

[*Elgin* I, C 11.]

304. 潛雅類書

Ch'ien ch'ō lei shu.

"An Encyclopædia." By 陳仁錫 Ch'ên Jen-hsi. Wylie says the 11th and 14th books were suppressed as having used an unguarded freedom of language respecting the Manchus. 8 cases, 60 vols. 120 chüan. 1632. *Ref.* Wylie, p. 150; B.M. p. 26; I.O.C. p. 10.

[*Elgin* II, C 1-8.]

305. 海國圖志

Hai kuo t'u chih.

"A History of Foreign Countries." Compiled by 魏源 Wei Yüan, from materials collected by the famous Commissioner Lin and himself. 2 cases. 60 chüan. 1849. *Ref.* B.M. p. 241. [Elgin II, C 9-10.]

306. 儀禮章句

I li chang chü.

The Decorum Ritual explained sentence by sentence. [Elgin II, C 11.]

307. 易經大全會解

Yi Ching ta ch'üan hui chieh.

"The Book of Changes, with explanatory comments by Chu Hsi, and others." Translated by Dr. Legge, *Sacred Books of the East*, vol. xvi. Into Latin, by J. Mohl, S.J., Stuttgart, 1834. *Ref.* B.M. p. 262; I.O.C. p. 15. [Elgin II, C 12.]

308. 古文雅正

Ku wên ya chêng.

"Elegant Extracts from Ancient Literature." Compiled by 蔡世遠 Ts'ai Shih-yüan. 2 cases, 8 vols. 14 chüan. Nanking, 1777. *Ref.* B.M. p. 207. [Elgin I, D 1-2.]

309. 廣博物志

Kuang pō wu chih.

"An Encyclopædia." A book of reference on everything that exists between heaven and earth. 3 cases, 22 vols. (1st volume missing). 1761. *Ref.* B.M. p. 222; Wylie, p. 150; Kidd, p. 16; L.U. 47, 5. [Elgin I, D 3-5.]

310. 鍼灸拔萃大成

Chên chiu pǒ ts'ui ta ch'êng.

This Japanese work, with its title, pronounced *Sin kiō pa tsi taji*, is a translation from the Chinese, which is "A complete account of the chief features of Acupuncture and Cantery." By 陽新賢 Yang Chin-hsien. *Ref.* Kidd, p. 42; B.M. p. 254. [Elgin I, D 6.]

311. 鍼灸聚英

Chên chiu chū ying.

This, like the preceding, is a Chinese book printed in Japan. It has the Japanese tone-marks. Inside is written "Singio Singe" (the Japanese title). "Instructions in Acupuncture and Cantery." 8 vols. 8 chüan. 1546.

[Elgin I, D 7.]

312. 一統志

Yi t'ung chih.

"A Geography of the Empire." Compiled by an Imperial Commission. 4 cases, 30 vols. *Ref.* B.M. p. 123; L.U. 131, 3. See No. 226.

[Elgin I, D 8—11.]

313. 論語義疏

Lun yü i su.

"The Confucian Analects." Translated under this title by Dr. Legge in vol. i of *The Chinese Classics*. Printed in Japan, with the tone-marks. This copy belonged to Titsingh, who calls it "Rongo Lukan Gisio." There is a memorandum of his in the book. 5 vols. *Ref.* B.M. p. 193.

[Elgin I, D 12.]

314. 傷寒三書合璧

Shang han san shu hō pi.

"A Treatise on Diseases arising from Colds." *Ref.* Kidd, p. 41; Wylie, pp. 82-3. See No. 267. [Elgin I, D 13.]

315. 書畫譜

Shu hua p'u.

6 cases, 48 vols. 100 chüan. 1710. [*Elgin* II, D 1—6.]

316. 分類字錦

Fên lei tzü chin.

A Classified Lexicon of Elegant Expressions. Compiled by Imperial Commission. 8 cases, 64 vols. 1722. *Ref.* B.M. p. 15.[*Elgin* II, D 7—11, also comprising II, E 11—13.]

317. 南海縣志

Nan hai hsien chih.

A Topographical account of the district of Nan-hai, in the department of Kuang-chou Fu. 2 cases, 20 chüan. 1741. *Ref.* Biot. p. 132; Kidd, p. 10.[*Elgin* I, E 1-2.]

318. 都名所圖會

Tu ming so t'u hui.

In Japanese called "To mei syo to kwai." A Japanese illustrated work, being a collection of views in the capital.

[*Elgin* I, E 3.]

319. 聖諭廣訓

Shêng yü kuang hsün.

"The Sacred Edict" of the Emperor K'ang Hsi. Translated by the Rev. W. Milne under this title. London, 1817; 2nd edition, Shang Hai, 1870. The Amplification, or first portion, has been translated into French by Piry, and published with the Chinese text. *Ref.* B.M. p. 94; L.U. 85, 2; Wylie, p. 71; Möllendorff, p. 27.[*Elgin* I, E 4.]

320. 三才圖會

San ts'ai t'u hui.

"An Encyclopædia." Vols 3, 8, 9, and 12 only. *Ref.* L.U. 72, 3.[*Elgin* I, E 5.]

321. 太平御覽

T'ai p'ing yü lan.

1807.

[Elgin I, E 6, to II, E 4.]

322. 韻府拾遺

Yün fu shih i.

"A Supplement to the *P'ei wén yün fu*." The latter is the great *Concordance* of all literature, arranged according to the rhymes. 4 cases, 24 vols. Ref. B.M. p. 230; Kidd, p. 2. [Elgin II, E 5—8.]

323. 春秋體註

Ch'un ch'iu t'i chu.

"The Spring and Autumn Annals." 4 vols. 4 chüan. 1711. Being the annals of the State of Lu from a.c. 722 to a.c. 484. Said to have been compiled by Confucius. Translated by Dr. Legge, vol. v of *The Chinese Classics*. See No. 275. Ref. B.M. p. 112. [Elgin II, E 9.]

324. 二十二史

Erh shih êrh shih.

"The Twenty-two Histories." (1) 32—40; (2) 71—80; (3) 81—88; (4) 89—97; (5) 98—107; (6) 108—117; (7) 112—142; (8) 125—130; (9) 131—134; (10) 135—142; (11) 143—150; (12) 151—159; (13) 160—164. Continued in next shelf. [Elgin I, F 1—13.]

325. 二十二史

Erh shih êrh shih.

"The Twenty-two Histories" (*continued*). (1) 165—171; (2) 172—179; (3) 180—187; (4) 188—194; (5) 195—202; (6) 203—210; (7) 211—218; (8) 219—227; (9) 228—234; (10) 235—242; (11) 243—250; (12) 251—262; (13) 263—272; (14) 273—283. [Elgin II, F 1—14.]

326. 二十二史

Êrh shih êrh shih.

"The Twenty-two Histories" (*continued*). (1) 284—295;
(2) 296—307; (3) 308—317; (4) 318—322; (5) 323—
329; (6) 330—336. [Elgin I, G 1—6.]

327. 淵鑑類函

Yüan chien lei han.

"An Encyclopædia." See No. 298. Arranged according
to subjects. Compiled by an Imperial Commission: (7) 8—
14; (8) 15—21; (9) 22—23; (10) 65—71; (11) 72—78
(*continued*). Ref. B. M. p. 11. [Elgin I, G 7—11.]

328. 淵鑑類函

Yüan chien lei han.

Continuation of above: (1) 79—85; (2) 86—92.

[Elgin II, G 1-2.]

329. 經世文編

Ching shih wên pien.

(3) 14—24; (4) 29—36; (5) 37—43; (6) 44—50;
(7) 51—57; (8) 58—65; (9) 66—73. [Elgin II, G 3—9.]

330. 十子全書

Shih tzü ch'üan shu.

"The complete works of the Ten Philosophers of Taoism."
Imperfect. Containing only 2 cases, vols. 15—22; 23—30
Ref. B. M. p. 88. [Elgin II, G 10-11.]

331. 大和名所圖會

Ta ho ming so t'u hui.

A Japanese-Chinese work, largely illustrated. The
drawings are very good. 6 vols. (first vol. missing).

[Elgin II, G 12.]

332. 曾文正公

Tsêng wên chêng kung.

"An Encyclopædia of Literature." 114 vols.

[Macartney I, II.]

333. 廣羣芳譜

Kuang ch'ün fang p'u.

An enlarged edition of the "Herbarium." See Nos. 178, 417. 6 vols. 100 chüan. 1709. [Macartney III, 1-6.]

334. 玉嬌梨

Yü chiao li.

"The Romance of The Two Cousins." See No. 45. 4 chüan, 20 chapters. Printed on back is, *Te san Tsae Tsze shoo*, or "Third class work of Genius," 第三才子書, in reference to the fanciful classification under which Chinese novels have been ranged. [Macartney III, 7.]

335. 水滸傳

Shui hu chuan.

By 施耐菴 Shih Nai-ngan. See No. 106. 1734. Ref. B.M. p. 181. [Macartney III, 8-9.]

336. 三國志

San kuo chih.

2 cases, 20 vols. 60 chüan. 1816. See No. 110. Printed on back is, *Te yih Tsae Tsze shoo*, or "First class work of Genius." See No. 334. [Macartney III, 10-11.]

337. 大學中庸

Ta Hsüo. Chung Yung.*

The "Great Learning" and "Doctrine of the Mean." The former, or part of it, is attributed to Confucius; the latter, to Tzú Ssü, grandson of Confucius.

[Macartney III, 12.]

* Translated by G. Pauthier. French, with Latin version and Chinese text. Paris, 1837. 8vo. Also by Cibot in *Mem. Conc. les Chinois*, i. pp. 436-459. 1776. Also by Dr. Legge, vol. i. of *The Chinese Classics*.

338. 易經書經詩經

The Yi Ching, Shu Ching and Shih King.

For the *Yi Ching*, see No. 307. Translations of the *Shu Ching* or "Book of History," and the *Shih Ching* or "Book of Poetry," form vols. iii and iv of Legge's *Chinese Classics*. [Macartney III, 13.]

339.

"Bible Lessons." Being the Scripture Lessons of the British and Foreign School Society. 1832.

[Macartney III, 14.]

340. Yüan jen pi chung.

[Macartney IV, 1—6.]

341. 景德鎮

Ching tê chên.

[Macartney IV, 7.]

342. 康熙字典

K'ang Hsi Tzu Tien.

"K'ang Hsi's Dictionary." The standard lexicon of the Chinese language. Arranged (1) under 214 radicals, or classifying keys, and (2) in groups according to the number of additional strokes of which each character is composed. Compiled by the orders and under the direction of the Emperor K'ang Hsi. 6 vols. in 12 parts. 1716. Ref. B.M. p. 94; I.O.C. p. 6; L.U. 30, 1. See No. 282.

[Macartney IV, 8—13.]

343. 御纂醫宗金鑑

Yü tsuan i tsung chin chien.

"The Golden Mirror of Medicine." A Collection of Medical Works, consisting of the *Shan han lun*, and *Chin kwei yao lueh*, by Chang Chi. Prescriptions of celebrated Physicians, Rules regarding the Pulse, &c. 1740. Ref. B.M. 243; L.U. 135, 4.

[Macartney V, 2—6.]

344. 禮記讀本

Li chi tu pên.

"The Original Text of the Book of Rites." 6 chūan.
(?) 1790. *Ref. B.M. p. 121.* Translated by Dr. Legge,
vols. xxvii and xxviii of *The Sacred Books of the East.*

[Macartney V, 7.]

345.

"Buddhist Tracts."

[Macartney V, 8.]

346. 射鷹樓詩話

Shê ying lou shih hua.

1851. Printed at Foochow.

[Macartney V, 9.]

347. 茶經

Ch'a Ching.

"A Treatise on the Tea Plant." 1735. *Ref. B.M. p. 146.*

[Macartney V, 10.]

348. 圖天圖說

Yüan t'ien t'u shuo.

"A Treatise on Astronomy." By 李明徹 Le Ming-ch'ê,
Taoist Priest, with Illustrations. 1819. *Ref. B.M. p. 128 ;*
L.U. 137, 3.

[Macartney V, 11.]

349.

Herschel's outlines of Astronomy, translated into Chinese,
by A. Wylie.

[Macartney V, 12.]

350. 蜃樓志

Shên lou chíh.

"The Story of the Sea Serpent." 4 vols. See No. 59.

[Pottinger, A 1.]

351. 分韻撮要

Fèn yün ts'ö yao.

An abridged Phraseological Guide, arranged according to the Rhymes. By 虞學圃 Yü Hsüö-pu. Ref. B.M. p. 265.
[Pottinger, A 2.]

352. 文章游戲

Wên chang yu hsi.

"Rambles in Polite Literature." Compiled by 繆蓮仙
Miu Lien-hsien. 4 vols. 8 chüan. 1803. Ref. B.M. p. 156;
L.U. 122, 3; Kidd, p. 28. [Pottinger, A 3.]

353. 天花潭批評

T'ien hua ch'êng p'i p'ing.

A Novel.

[Pottinger, A 4.]

354. 江湖尺牘分韻撮要合集

Chiang hu ch'ih tu fên yün ts'ö yao hō chi.

See No. 383. 1803. Ref. B.M. p. 265; Kidd, p. 1;
L.U. 33, 1. [Pottinger, A 5.]

355. 虞初續志

Yü ch'ü hsü chih.

5 vols. 10 chüan. 1802.

[Pottinger, A 6.]

356. 好逑傳

Hao ch'iu chuan.

"The Fortunate Union." A copy annotated and stopped
with red. See Nos. 118, 126. 4 chüan. 1787. Ref. B.M.
p. 103. [Pottinger, A 7.]

357. 孔子家語原註

K'ung tzü chia yü yüan chu.

"The Family sayings of Confucius." Edited, with a Com-
mentary, by 王肅 Wang Su. 2 vols. 4 chüan. 1805.
See No. 167. Ref. B.M. p. 229. [Pottinger, A 8.]

358. 十二樓

Shih êrh lou.

6 vols. 1658.

[Pottinger, A 9.]

359. 度生公案

Tu shêng kung ngan.

"Collection of Criminal Cases." 3 vols.

[Pottinger, A 10.]

360. 畫圖錄

Hua t'u yüan.

"A Treatise on Painting and Drawing." Illustrated.
4 vols. [Pottinger, A 11.]

361. 東北遊記

Tung pe yu chi.

"Narratives of Travels in the West and North." Two
volumes are given to each, and every page has an illustration. 4 vols.
[Pottinger, A 12.]

362. 詩法入門

Shih fa ju mên.

"Elements of Poetical Composition." [Pottinger, A 13.]

363. 重訂綴白裘新集合編

Ch'ung ting chui pō ch'iu hsin chi hō pien.

New edition of a well-known Collection of Plays. See
No. 157. 6 cases, 48 vols. [Pottinger, B 1—4.]

364. 讀史論畧

Tu shih lun lüo.

"On the Study of History."

[Pottinger, B 5.]

365. 法語錦囊

Fa yü chin nang.

6 vols.

[Pottinger, B 6.]

366. 西廂曲

Hsi hsiang ch'ü.

The Play of the "Western Chamber." 3 vols. (first vol. missing). *Ref.* B.M. p. 169. [*Pottinger*, B 7.]

367. 西廂曲

Hsi hsiang ch'ü.

The Play of the "Western Chamber." 6 vols. [*Pottinger*, B 8.]

368. 天花藏

T'ien hua tsang.

4 chüan, 20 hui.

[*Pottinger*, B 9.]

369. 靈魂篇

Ling hun p'ien.

"An Essay on the Nature, Immortality, Value and Destiny of the Human Soul." By Dr. Wm. Milne, late of Malacca. Presented by Rev. Dr. Morrison, 18 April, 1826. 2 vols. 1825. *Ref.* B.M. p. 166. [*Pottinger*, B 10.]

370. 紅樓夢

Hung lou mêng.

"The Dream of the Red Chamber." 2 cases, 20 vols. For brief notice, see No. 388. [*Pottinger*, C 1-2.]

371. 唐平鬼全傳

T'ang p'ing kuei ch'üan chuan.

"The Story of the Pacification of the Demons." A Romance of the T'ang Dynasty (A.D. 618—905). 2 vols. *Ref.* B.M. p. 118. [*Pottinger*, C 3.]

372. 十種曲

Shih tsung ch'ü.

By 笠翁 Li Wêng. 10 vols. (1st vol. missing). See No. 69. *Ref.* B.M. p. 133; L.U. 55, 2. [*Pottinger*, C 4.]

373. 三 國 志

San kuo chih.

"The History of the Three Kingdoms." 2 cases, 20 vols.
[Pottinger, C 5-6.]

374. 廣 善 堂 函

Kuang shan hui han.

"Moral Virtues Extended." A Collection of Treatises
on Various Subjects in Moral Philosophy. Published by
Imperial Authority. 2 vols. [Pottinger, C 7.]

375. 三 國 志

San kuo chih.

"The History of the Three Kingdoms." An Historical
Romance. 2 cases, 20 vols. See Nos. 110, 250, 257.
[Pottinger, D 1-2.]

376. 新 增 資 治 新 書 二 集

Hsin tsêng tzû chih hsin shu êrh chi.

A work on Political Economy, embracing a variety of
topics pertaining to the authority of the Legislature and
the well-being of its subjects. 10 vols. *Ref.* Kidd, p. 23.
[Pottinger, D 3.]

377. 地 理 備 考

Tì li pei k'ao.

"The Student's Manual of Geography," translated into
Chinese. [Pottinger, D 4.]

378. 封 神 演 義

Fêng shên yen i.

A tale regarding the adventures of Wu Wang, the founder
of the Chou Dynasty, in his contest with Chou Wang, the
last of the House of Shang. 2 cases, 20 vols. *Ref.* B.M.
p. 55; L.U. 17, 4. See No. 44. [Pottinger, D 5-6.]

379. 情史

Ch'ing shih.

"History of the Loves of Celebrities." By 詹詹 Chan Chan. 12 vols. 1806. *Ref.* B.M. p. 22; L.U. 116, 1. See No. 42. [Pottinger, E 1.]

380. 後說鈴

Hou shuo ling.

The Supplementary *Shuo ling*. This latter work (see No. 90) is an Account of Embassies from foreign countries. The *Hou Shuo ling* is a later work on the same subject. [Pottinger, E 2.]
1 case, 8 vols.

381. 水滸傳

Shui hu chuan.

An Historical Novel called, "The Story of the River Banks." Imperfect. Only vols. 11—20. 20 chüan, 38—75. 1734. See, for complete copies, Nos. 106, 120, 151. *Ref.* B.M. p. 181; Kidd, p. 13; L.U. 86, 5. [Pottinger, E 3.]

382. 東周列國全志

Tung chou lieh kuo ch'üan chih.

A History embracing the period from the Eastern Chou dynasty to the commencement of the Ch'in dynasty, 800 to 221 B.C. Imperfect. Only vols. 13—24. *Ref.* B.M. p. 207; L.U. 118, 5. [Pottinger, E 4.]

383. 江湖尺牘分韻撮要合集

Chiang hu ch'ih tu fên yün ts'o yao ho chi.

A Letter Writer for Travellers, and abridged Phraseological Guide, arranged under the Rhymes. 4 vols. 1798. *Ref.* B.M. p. 265; Kidd, p. 1; L.U. 33, 1. [Pottinger, E 5.]

384. 聊齋志異

Liao chai chih i.

2 cases, 16 vols. 1765. See No. 40.

[Pottinger, E 6-7.]

385. 廣州府志
Kuang chou fu chih.

A Topography of Kuang-chou Fu (Canton). 12 vols. (9th vol. missing). European binding. [Pottinger, F 1—12.]

386. 雙鳳奇
Shuang fêng ch'i.

"The Wonderful Story of the Two Phoenixes." An Historical Romance founded upon events which occurred during the Han Dynasty. 7 vols. 80 hui. 1813. Ref. B.M. p. 184; L.U. 86, 4. See No. 54. [Pottinger, F 13.]

387. 清閒評
T'ao wu hsien p'ing.

"The Leisure Notes of a Fool." 1 case, 10 vols. 50 chüan. Circa 1800. Ref. B.M. Cat. p. 201; Kidd, p. 55. [Staunton I, A 1.]

388. 紅樓夢
Hung Lou Mêng.

Commonly known as "The Dream of the Red Chamber." But "Red Chamber" is used figuratively in the sense of *wealth and power*, the work itself being a novel, on the grandest possible scale, dealing with the falling fortunes of a once wealthy and once powerful family. It extends to 120 chapters, filling 24 vols. 8vo. of about 120 pages to each. In the course of the story more than 400 characters are introduced, and these are delineated with such masterly skill that even this immense number scarcely creates any confusion in the reader's mind. For an epitome of the story, which abounds both in humour and in pathos, see *Journal of the China Branch of the Royal Asiatic Society* for 1885, p. 1. The story is said to have been written by 曹雪芹 Ts'ao Hsüeh-ch'in, early in the present dynasty; and in consequence of certain alleged sneers at the Manchus was placed in the *Index Expurgatorius*. But it is now sold and read freely all over the empire. 24 vols. 2 cases, 120 sections. Early in the 19th century. Ref. Wylie, p. 162; B.M. Cat. p. 209; Kidd, p. 51; L.U. 23, 5.

[Staunton I, A 2-3.]

389. 紅樓復夢

Hung lou fu mêng.

"The Second Dream of the Red Chamber." By 少海氏 Shao Hai-shih. The details will be found in preceding entry. 3 cases, 31 vols. 100 chüan. 1800. Ref. B.M. Cat. p. 325; L.U. 25, 5. [Staunton I, A 4—6]

390. 六部處分則例

Liu pu ch'u fên tsê li.

The Rules of the "Six Boards," in Peking, in reference to the censure or punishment of officials. These are the Boards of Appointments, Revenue, Ceremonies, Army, Punishments, and Public Works. 36 vols. 4 cases (1 missing) 1809. [Chia Ch'ing, 13th year.] Ref. Not in Wylie or B.M. Cat.; Meyer, p. 326. [Staunton I, A 7—10.]

391. 滿漢名臣傳

Man Han ming ch'ên chuan.

"The Lives of Illustrious Statesmen, Manchu and Chinese." 48 chüan are taken up by the former and 32 by the latter. The work was published during the Ch'ien Lung period (1736—96) by Imperial authority. 10 cases, 80 chüan. Circa 1750. [Staunton II, A 1—10.]

392. 算法統宗

Suan fa t'ung tsung.

About the middle of the Ming dynasty (1368—1628). 程大位 Ch'êng Ta-wei composed this work, the main object of which is to elucidate the principle of the Abacus in its application to the rules of arithmetic. It gives a general detail of the formulæ of the Chiu Chang 九章 (see Mayer's *Chinese Reader's Manual*, p. 340, number 262), but there is little originality, and the style of composition is rugged and prolix in the extreme. The work is edited by 吳繼綬 Wu Chi-shou. 6 vols. 12 chapters. 1593. Ref. B.M. Cat. pp. 39 and 246; Wylie, p. 95; L.U. 92, 2.

[Staunton II, A 11.]

393. 金石姻緣

Chin shih yin yüan.

The celestially-brought-about union of Chin and Shih.
20 chapters. 1794. See Nos. 8, 114. *Ref.* L.U. 38, 5.
[Staunton II, A 12.]

394. 禮記芥子園重訂監本禮記

Li Chi. Chieh tzü yüan ch'ung ting chien
pên Li Chi.

The Chieh tzü yüan edition of the "Book of Rites," with
a collection of comments compiled by 陳澧 Ch'ên Hao,
edited by 李氏 Li Shih. 10 vols. Nanking, 1790. 8 vols.
Ref. B.M. Cat. p. 121; I.O.C. No. 23.
[Staunton I, B 1.]

395. 周禮註疏

Chou li chu su.

The Chou Ritual. On the first page it is called the Chou
Li chi i 輯義; or, "A Concordance of the Chou Ritual."
6 vols. and 12 chüan. 1796. *Ref.* Douglas, p. 50; 2 other
editions, not this one, I.O.C. No 21; L.U. 6, 5.
[Staunton I, B 2.]

396. 唐律疏義

T'ang lü su i.

"The Laws of the T'ang dynasty (A.D. 618—905)
explained." The work commences on the 4th year of the
Yung Hui 永徽 period of the Emperor Kao Tsu (654).
16 MS. vols. 30 chüan. 2 cases. [Staunton I, B 3-4.]

397. 左傳

Tso hsiu.

[Staunton I, B 5.]

398. 婺源縣志

Wu yüan hsien chih.

A statistical and general account of the district town of
Wu-yüan, the name of the department and town of the
3rd order in Hui-chou Fu in the province of Kiang-nan.
2 cases, 14 vols. *Ref.* Biot. Dict. des Villes, p. 150.
[Staunton I, B 6-7.]

399. 大清律例

Ta Ch'ing lü li.

The fundamental statutes and subordinate laws of the Ch'ing dynasty. 20 volumes, complete. 1810. Translated by Sir G. Staunton. *Ref.* B.M. p. 218; I.O.C. p. 58; Kidd, p. 37; R.A.S., Staunton I, B 7-8; Wylie, p. 57.

[Staunton I, B 8-9.]

400. 儀禮章句

I Li chang chü.

"The Decorum Ritual explained, sentence by sentence." 4 vols. 1798. *Ref.* B.M. 59; I.O.C. p. 19; Wylie, p. 5. [Staunton I, B 10.]

401. 易經

Yi Ching.

"The Book of Changes." Full title is, 易經大全會解 "The Book of Changes, with explanatory comments." By Chu Hsi, Chu Fung-lin, and others. Compiled by Lai Mu-chên. The Tsung-tao-t'ang edition, 4 chüan. 1681. See No. 307. *Ref.* B.M. 262; I.O.C. p. 15; Kidd, p. 25; Wylie p. 1. [Staunton II, B 1.]

402. 艸字彙

Ts'ao tzü hui.

A Dictionary or collection of the cursive forms, or "Grass characters." By 石梁 Shih Liang. It consists of facsimile copies of the handwriting of great poets and others celebrated in Chinese literary history. The characters are arranged under the radicals. No meanings are given, but the names of the writers, whose autographs are represented, are printed in the margin. In 6 vols. 1786. *Ref.* I.O.C. p. 4; L.U. III, 2. [Staunton II, B 2.]

403. 易經

Yi Ching.

"The Book of Changes." See Staunton II, C 1, and No. 307, for account and references. 2 vols. 4 chüan. 1818.
[Staunton II, B 3.]

404. 小學

Hsiao hsüo.

"Learning for the Young" 4 vols. See No. 129. *Ref.* B.M. p. 46; Wylie, p. 68.
[Staunton II, B 4.]

405. 諧聲品字箋

Hsieh shêng p'in tzü chien.

A Phonetic Dictionary, compiled by 虞德升 Yü Tê-shêng. There are in all 96 leading characters, the vocables under which amount to 1500, embracing more than 60,000 characters. 7 vols. 1677. *Ref.* B.M. 266.

[Staunton II, B 5.]

406. 遣愁集

Ch'ien ch'ou chi.

"Essays to Dispel Grief." A series of articles which the author considers calculated to dispel melancholy. Compiled by Chang Kuei-shêng, edited by Yü Sao and Ku Yü-hsiao. 6 vols. 12 chüan. (?) 1830. *Ref.* B.M. p. 13.

[Staunton II, B 6.]

407. 文公家禮正衡

Wên Kung chia li chêng hêng.

"On Domestic Ceremonies," by Wên Kung. Chu Hsi's "Family ceremonies." Corrected, adjusted and edited by 彭演 P'êng Pin. 4 vols. 8 chüan. 1762. *Ref.* L.U. 123, 1.

[Staunton II, B 7.]

408. 昭明文選
Chao ming wên hsüan.

"A collection of elegant extracts from polite literature." Compiled by Prince Hsiao Tung, of the Liang dynasty. (A.D. 507—557). With a commentary by Li Shan, edited by Yeh Shu-fan. Only contains 8 vols. and 26 chüan. 16 vols. 60 chüan. 1771. *Ref.* B.M. p. 169; L.U. 124—1.

[Staunton II, B 8.]

409. 楚辭集註
Ch'u tz'ü chi chu.

"The Elegies of Ch'u," with a commentary by Chu Hsi. By 屈原 Ch'ü Yüan, of the 4th century, B.C. 4 vols. 17 chüan. *Ref.* B.M. 102; Wylie, pp. 181-2.

[Staunton II, B 9.]

410. 搜神記
Sou shên chi.

"Handbook of Mythology," edited by Yang Kuang-lieh 楊光烈. The original work was by Kan Pao, who lived in the early part of the 4th century. It was in 30 vols. 3 chüan. 1750. See No. 300. *Ref.* Wylie, "Notes;" B.M. Cat. p. 94.

[Staunton II, B 11.]

411. 爾雅
Êrh ya.

"The Literary Expositor." Commented on by K'ö P'ö. This is an illustrated dictionary of terms used in the classical and other writings of the Confucian period, and is of great importance in elucidating the meaning of words. It is divided into 19 sections, each of which treats of a separate class of subjects. The authorship is attributed to Tz'ü Hsia. 4 vols. 1803. Copies of this work (large 4to) were formerly very valuable. But reproductions by the photo-lithographic process (8vo) are now sold at a cheap rate in Shanghai. *Ref.* Wylie, p. 7; B.M. p. 224; I.O.C. p. 20; L.U. 120, 5.

[Staunton II, B 13.]

412. 東西漢全傳

Tung hsi Han ch'üan chuan.

Chronicles of the Eastern and Western Han dynasties.

[Staunton II, B 13.]

413. 琴譜

Ch'in p'u.

"The music book for the Ch'in, or Chinese zitha." 4 vols. 8 chüan. 1662. *Ref.* B.M. Cat. p. 53 (1746); L.U. (1802) 38, 3.

[Staunton II, B 14.]

414. 選集漢印分韻

Hsüan chi han yin fên yün.

A fine copy of a most valuable work, in which the "Seal" forms of all the most important characters are drawn. Arranged according to the rhymes. 1798.

[Staunton II, B 15.]

415. 藝文通覽序

I wên t'ung lan hsi.

[Staunton I, C 1—7.]

416. 韻府羣玉

Yün fu ch'ün yü.

A small Encyclopædia of the period of the Yüan dynasty (1280—1341), by 陰時夫 Yin Shih-fu. 20 vols. 20 chüan. 1763. *Ref.* Wylie, p. 10.

[Staunton I, C 8-9.]

417. 羣芳譜

Ch'ün fang p'u.

This work is a "Herbarium," compiled by Wang Hsiang-chin, and published about the close of the Ming dynasty. The chief portion of the work consists of extracts from preceding authors, ancient and modern, regarding the various productions of the garden and field, given *seriatim*, but without much judgment in the arrangement. It is divided into 12 parts, under the heads of: "the heavens; the year; grains; vegetables; fruit; tea and bamboo; mulberry;

hemp and grass cloth plants; trees; flowers; storks; and fish. The details relate mainly to the medical virtues of the different objects, while the remarks on cultivation are very superficial. 18 vols. 12 parts. 1708. See No. 178. *Ref* Wylie, p. 122; B.M. 234. [*Staunton* I, C 10-11.]

418. 類經圖翼

Lei Ching t'u i.

The *Lei ching*, in 32 books, is the production of 張介賓 Chang Chieh-pin, a celebrated physician. The theme of the work is the two ancient books, *Su wên* 素問 and *Ling shu ching* 靈樞經 (see Nos. 291 and 295), which are dissected and arranged under twelve heads, namely, sanitary considerations; masculine and feminine principles; form of the intestines; pulse and appearance; sinews and nerves; radical and ultimate conditions; breath and taste; medical treatment; disease and sickness; acupuncture; circulation of air; pervading principles. These disquisitions, which embody the views of the author, are followed by eleven books of diagrams and auxiliary remarks. These latter are the works now catalogued. 11 chüan. 1624. *Ref.* B.M. 12; Kidd, 26; Wylie, p. 81. [*Staunton* II, C 1.]

419. 元人百種曲

Yüan jen pò tsung ch'ü.

The celebrated hundred comedies of the Yüan dynasty published during the reign of the Emperor Wan Li. 40 vols. 1573—1620. *Ref.* Wylie, p. 206; Kidd, p. 53.

[*Staunton* II, C 2—5.]

420. 古文分編集評

Ku wên fên pien chi p'ing.

"Selections from Ancient Literature." 18 vols. in 2 cases. (first vol. missing). [*Staunton* II, C 6-7.]

421.

The Pentateuch (called the Shêng Ching), printed at Serampore with metallic movable characters. 1817.

[*Staunton* II, C 8.]

422. 景岳全書

Ching Yǒ ch'üan shu.

The whole works of Dr. Ching Yǒ, a medical writer of considerable eminence in China during the 15th century. He was otherwise known as Dr. Chang Chieh-pin 張介賓 (see No. 418). 24 vols. 64 chüan. 4 cases. 1710. Medical writers. *Ref.* B.M. p. 12; Kidd, p. 43; L.U. 42, 3 (1790).

[Staunton I, D 1—4.]

423. 欽定戶部則例

Chin ting Hu pu tsê li.

Regulations of the Board of Revenue and population. By Imperial command. 32 vols. 1762.

[Staunton I, D 5—8.]

424. 審音鑑古錄

Fan yin chien ku lu.

A very fine illustrated edition of the best novels, 14 in number.

[Staunton I, D 9.]

425. 新遺詔書

Hsin i chao shu.

The New Testament in Chinese, translated by Robert Morrison. Serampore. 8 vols. 8vo. 1813. *Ref.* B.M. p. 2; L.U. 88, 2; I.O.C. p. 56 (1815).

[Staunton I, D 10.]

426. 千叟宴詩

Ch'ien sou yen shih.

A Collection of Odes, laughter-moving and jovial, as befits a banquet. 36 chüan. 4 cases. 1785.

[Staunton II, D 1—4.]

427. 大清會典

Ta Ch'ing hui tien.

Statutes of the Empire of China. A comprehensive description of the system of government under the Ch'ing, or Manchu-Tartar, dynasty. 24 vols. in 3 cases. 1764. *Ref.* B.M. p. 217.

[Staunton II, D 5—7.]

428. 淳化閣帖考正
Ch'un hua kō t'ieh k'ao chêng.

"Revised Inscriptions of the Ch'un Hua Hall." 1848.
[Staunton II, D 8.]

429. 籌海圖編
Ch'ou hai t'u pien.

This work, as written in 16 books by 鄭若曾 Chêng Jō-ts'êng, is a minute detail of the seaboard districts of China, illustrated by an extensive series of maps in the rudest style of art. The main object of the work is the discussion of plans of defence against the seafaring marauders from Japan, who proved a formidable scourge to the inhabitants of the coast during the Ming dynasty. This work appeared in 1562, and another edition in 1582. 8 vols. 13 chüan. 1624.
[Staunton II, D 9.]

430. 周易折中
Chou Yi chē chung.

The *Chou Yi*, is the *Chou Changes*, the book being, in fact, the *Yi Ching*, "The Book of Changes," the *Chou Changes* being a name applied to it in reference to the texts by Wên Wang and Chou Kung. See No. 307. There is a long description of this book in Wylie, p. 2. 12 vols. in 2 cases. 1716. Ref. Wylie, p. 2. [Staunton II, D 10-11.]

431. 東西洋考
Tung hsi yang k'ao.

"Chang Hsieh's (張燮) account of those countries in the southern and eastern seas," which had commercial interviews with China during the period of the Ming dynasty (1368—1628). 12 chüan. 1618. Ref. B.M. 9; L.U. 119, 2. [Staunton II, D 12.]

432. 禮記圖四
Li Chi t'u ssu.

An Imperial edition in 82 chüan, being 77 chüan and 5 chüan of illustrations. 5 cases. Marginally called the 禮記義疏 Li Chi i ssu. The meaning of "The Book of Rites." (?) 1700. Ref. B.M. 121. [Staunton I, E 1-5.]

433. 華嚴經

Hua yen ching.

The Chinese version of the Buddha Purvāna Sutra.
Yung Lō, 10th year. 16 vols. 1413.

[Staunton I. E 6-7.]

434. 困學紀聞

K'un hsüo chi wên.

"A series of Literary and Scientific critical remarks."
By 王應麟 Wang Ying-lin. 14 vols. in 2 cases. 1814.
Ref. L.U. 45, 5; 46, 2; Wylie, p. 129; B.M. 237.

[Staunton I, E 10.]

435. 露亭字韻

Hsiao t'ing tzü yüan.

3 vols. 29 chüan. 1805.

[Staunton I, E 10.]

436. 莊子南華經解

Chuang tzü Nan hua ching chieh.

The Canon of Nan hua, by Chuang Tzū, explained.
Formerly known under the simpler title of "Chuang Tzū."
This work was re-christened as above in 742 A.D., with a
view to its establishment as a "Canon" of debased Taoism.
It contains the genuine philosophical speculations of Chuang
Tzū, who flourished in the 3rd century B.C., together with
much that is undoubtedly spurious. Translated by H. A.
Giles, under the title of "Chuang Tzū, Mystic, Moralist,
and Social Reformer." 3 vols. 3 chüan. 1722. Ref. Mayer's
Chinese Manual, art. 92, p. 30; Wylie, p. 174; B.M.
(inserted), 57; Kidd, p. 22.

[Staunton I, E 11.]

437. 杜工部集

Tu kung pu chi.

10 vols. 20 chüan. 1824.

[Staunton II, E 1.]

438. 萬善同歸

Wan shan t'ung kuei

This is a treatise on the unity of origin of every excellence ; all being traced to "Buddhism in the heart." It was written by the priest 永明壽 Yung Ming Shou, and published, with a preface, by the Emperor, at the date mentioned. 2 vols. 6 chūan. 1734. *Ref.* Wylie, p. 171 ; L.U. 124, 3 ; B.M. 271. [*Staunton* II, E 2.]

439. 大明會典

Ta Ming hui tien.

The Imperial Statutes of the Ming dynasty (1368—1628). 228 chūan, 48 vols. 6 cases. 1577. *Ref.* B.M. p. 157. [*Staunton* II, E 3—8.]

440. 說文真本

Shou wên chên pên.

The celebrated dictionary of the Lesser Seal character, and earliest lexicon of the Chinese language. Compiled by 許慎 Hsü Shên, an officer in the government service, A.D. 100. It is a collection of all the Chinese characters then in existence, amounting to about 10,000, analysed by the author into their original picture elements, with a view of showing the "hieroglyphic" origin of the Chinese language. It was the first lexicon arranged under *radicals*, for which purpose 540 were called into use, subsequently reduced in the K'ang Hsi dictionary to the more manageable number of 214. (See No. 342.) An ingenious key to the 540 radicals of the *Shuo Wên*, bringing them into numerical rapport with the 214 of K'ang Hsi, and enabling the student to use the former lexicon with ease, was published some years back by Dr. Chalmers in the columns of the *China Review*. 6 vols. in one. 1598. *Ref.* Wylie, p. 8 ; Kidd, p. 3 ; L.O.C. p. 3 ; B.M. 74. [*Staunton* II, E 9.]

441. 御製增訂清文鑑

Yü chih tsêng ting ch'ing wên chien.

45 vols. in 8 cases.

[Staunton I, F 1—8.]

442. 東華錄

Tung hua lu.

An account of the reigning Tartar dynasty of China, composed by some historiographers of government during the reign of Ch'ien Lung (1736—1796). The work is a summary of events from the origin of the dynasty down to the year 1734, and is edited by 蔣良騏 Chiang Liang-chi. *Ref.* B.M. p. 340; Kidd, p. 10.

[Staunton I, F 9—12.]

443. 大佛頂首楞嚴經後記

Ta Fō ting shou Lêng Yen Ching chi chi.

"The Lêng Yen Sutra." 5 vols. 10 chüan. 1734.

[Staunton I, F 13.]

444. 大六壬大全

Ta liu jen ta ch'üan.

A work on fortune-telling and divination by means of Astrology, and entitled the "Six Astronomical Signs." 13 vols. 13 chüan. 2 cases. 1704. *Ref.* B.M. p. 145; L.U. 96, 3; Kidd, p. 28.

[Staunton I, F 14, 15.]

445. 名臣奏議集畧

Ming ch'ên tsou i chi lüeh

A general collection of Memorials addressed to the Emperor, by celebrated ministers of successive ages. 32 vols. in 8 cases. 1st and 2nd chüan missing. *Ref.* Kidd, p. 12.

[Staunton II, F 1—8.]

446. 聖諭廣訓

Shêng yü kuang hsin.

The sixteen Maxims of the Emperor K'ang Hsi, amplified by his successor, Yung Chêng. 1725. For details, see No. 319. *Ref.* L.U. 85, 2.

[Staunton II, F 9.]

447. 清文啓蒙

Ch'ing wên ch'i mêng.

A Manchu-Chinese Grammar. 4 vols. Translated by A. Wylie, Shanghai, 1856. [Staunton II, F 11.]

448. 太素脉

T'ai su mǒ.

[Staunton II, F 12.]

449. 人天眼目

Jen Tien yen mu.

"The eyes of Men and of Heaven." A Buddhist work by the priest 仁 峴 Jen Chü. 2 vols. 2 chüan. 1703. Ref. L.U. 28, 3; Kidd, p. 46; B.M. p. 92.

[Staunton II, F 13.]

450. 戒殺放生文

Chieh sha fang shêng wên.

"On abstention from taking life and releasing captive animals." By 祿 宏 Chu Hung. Canton. 1790. Ref. B.M. p. 48; L.U. 32, 3; Kidd, 47.

[Staunton II, F 14 a.]

451. 玉歷鈔傳警世

Yü li ch'ao chuan ching shih.

"The Ten Courts of Purgatory," with full description of the various punishments and tortures to which erring souls are subjected during the transition state of metempsychosis. Translated by H. A. Giles, as an appendix to the *Liao Chai*. See No. 40. [Staunton II, F 14 b.]

452. 禪門日誦

Ch'an mên jih sung.

"Selections for daily services." A number of devotional extracts from the Buddhist canon, by different authors. Compiled by 默 持 Mò Ch'ih. 1792. Ref. B.M. 156; I.O.C. p. 43; L.U. 81, 3. [Staunton II, F 15.]

453. 綠蔭庭詩鈔

Lu yin t'ing shih ch'ao.

"The Odes of the Green Shaded Hall." 2 vols. *Ref.*
Kidd, p. 15. [Staunton II, F 16.]

454. 瀛環志畧

Ying huan chih lüeh.

"A geographical treatise on the world." By 徐繼畲
Hsü Chi-yü. 6 vols. 10 chüan. 1848. Geography.
[Staunton I, G 1.]

455. 開國方略

K'ai kuo fang lüeh.

2 cases, 12 vols. 32 chüan. 1786. [Staunton I, G 2-3.]

456. 古玉圖

Ku yü t'u.

An illustrated work on ancient vessels, insignia, weapons,
&c. A compilation by 王黼 Wang Fu and others. 1 vol.
1752. *Ref.* B.M. p. 326; Kidd, p. 32; L.U. 69, 4; I.O.C.
p. 2. [Staunton I, G 4 a.]

457. 考古圖

K'ao ku t'u.

An illustrated collection of antiquities. By Wang Fu
and others. See last entry. 5 vols. 1752. *Ref.* B.M. p. 228;
Kidd, p. 32; I.O.C. p. 2; L.U. 69, 4.

[Staunton I, G 4 b.]

458. 四書合講

Ssü shu hō Chiang.

The Four Books, harmoniously explained, according to
the Commentary of Chu Hsi. With a Paraphrase. 6 vols.
1819. The "harmony" introduced by Chu Hsi consisted
in uniformity of exegesis. He did not, as the Han scholars
had done, interpret the same combination in various ways
merely to suit the supposed exigencies of the text. *Ref.*
B.M. p. 192.

[Staunton I, G 5.]

459. 列女傳

Lieh nü chuan.

Biographical sketches of eminent women. Illustrated.
12 vols. 16 chüan. 1780. *Ref.* Kidd, p. 13.

[*Staunton* I, G 6.]

460. 四書合講

Sü shu hō Chiang.

The Four Books, harmoniously explained according to
the Commentary of Chu Hsi. With a paraphrase. 6 vols.
1813. See No. 458. *Ref.* B.M. p. 192.

[*Staunton* I, G 7.]

461. 農政全書

Nung chêng ch'üan shu.

"The Thesaurus of Agriculture." 60 chüan. 2 cases.
1843. *Ref.* B.M. p. 175.

[*Staunton* I, G 8-9.]

462. 廣輿圖

Kuang yü t'u.

An Atlas of the Chinese Empire. Compiled by 羅洪先
Lô Hung-hsien, with the maps of 朱思本 Chu Ssü-pên.
4 vols. 2 chüan. 1579. *Ref.* B.M. 142.

[*Staunton* I, G 10.]

463. 二妙

Erh miao.

Drawing of bamboo, &c.

[*Staunton* I, G. 11a.]

464. 官子譜

Kuan tzü p'u.

A series of chess diagrams. 1800.

[*Staunton* I, G 11b.]

465. 無雙譜

Wu shuang p'u.

Biographical Notices of Peerless Worthies. By 金古真
Chin Ku-liang. 1690.

[*Staunton* I, G 11c.]

466. 東坡遺意

Tung p'ō i i.

Posthumous Reflections of Su Shih 蘇軾, known as the poet Su Tung-p'ō. 1780. [Staunton I, G 11d.]

467. 同文千字文

T'ung wên ch'ien tzū wên.

"The Thousand-character Essay," according to the three forms of writing: the Seal, or ancient character; the Running-hand, or grass character; and the Clerk's, or ordinary character; in two vols. So called because it contains exactly 1000 *different* characters, arranged in intelligible though disconnected sentences. Was put together in a single night by Chou Hsing-ssü 周興嗣, a distinguished scholar of the sixth century of our era, his hair turning white under the effort. Is the second primer put into the hands of the Chinese schoolboy (see No. 520), and is studied more for the sake of its 1000 characters than for any useful knowledge they may contain. 1 case, 2 vols. 1582.

[Staunton I, G 12.]

468.

Algebraic geometry, with differential and integral calculus. By A Wylie, of Shanghai. Published in Chinese, in 5 vols. 1859.

[Staunton II, G 1.]

469. 談天

T'an t'ien.

Herschel's Astronomy, in 5 vols. Published by A. Wylie, in Chinese. 1859.

[Staunton II, G 2.]

470. 博古圖

Pō ku t'u.

"An Illustrated Collection of Antiquities." Compiled by Wang Fu and others. 1752. 3 cases, 18 volumes. *Ref.* B.M. 228; I.O.C. p. 2. See Nos. 456, 457.

[Staunton II, G 4—6.]

471. 禮書綱目

Li shu kang mu.

"A condensation of the history of Forms and Ceremonies."

By 江永 Chiang Yung. 4 cases, 82 vols. 85 chüan. 1722.

Ref. B.M. 100.

[Staunton II, G 7—10.]

472. 道德經

Tao tê ching.

"The Canon of Tao and the Exemplification thereof." This work has been attributed, but on wholly insufficient grounds, to the philosopher 老君 Lao Chün, or Lao Tzū, of the 7th century B.C. The balance of evidence goes to show that it was pieced together, not earlier than the second century of our era, from the recorded sayings of Lao Tzū; and padded out with mysterious utterances to suit the phase of superstition through which the pure philosophy of Tao was then passing. For this view of the question, see *The Remains of Lao Tzū*, by H. A. Giles, Hong Kong, 1886. For translations, see No. 202.

[Staunton II, G 12.]

473. 六道集

Liu tao chi.

"The Six Paths." A Buddhist work. By 弘贊 Hung Tsan. 2 vols. 1682. Ref. B.M. 83; L.U. 58, 1.

[Staunton II, G 12.]

474.

Chinese Almanacs for the years 1733, 1795, 1807, 1811. Ref. B.M. p. 60.

475. 常活之道傳

Ch'ang huo chih tao chuan.

"The Doctrines of Eternal Life." 6 chapters. 1834.

476. 創世傳註釋
Ch'uang shih chuan chu shih.

"The Book of Genesis." With Explanatory Notes. By W. Deane. Hong Kong. 1 vol. 1850.

477. 正字千文
Chêng tzū ch'ien wên.

A Manual, showing the different forms of writing characters. 2 vols. 1820.

478. 正字通
Chêng tzū t'ung.

A Chinese Dictionary. Compiled by 廖文英 Liao Wên-ying. 16 vols. See No. 253. Ref. B.M. p. 132; L.U. 5, 2.

479. 春秋體註大全合參
Ch'un ch'iu t'i chu ta ch'üan hō ts'an.

"The Spring and Autumn Annals." With a body of comments, and with the Commentary of Hu Ngan-kuo 胡安國. 1711. 4 vols. 4 chüan. See No. 323. Ref. B.M. p. 112.

480. 番禺縣志
P'an yü hsien chih.

A Topography of the District of P'an-yü. 1 vol. 1774.

481. 霽屑軒尺韻類選
Fei hsiao hsien ch'ih tu lei hsüan.

"A Model Letter Writer." Compiled by 陳世熙 Ch'ên Shih-hsi. Ref. B.M. p. 28; L.U. 15, 1.

482. 福惠全集
Fu hui ch'üan chi.

8 vols. 32 chüan.

483. 粉粧樓全傳

Fên chuang lou ch'üan chuan.

"The Story of the Painted Pavilion," with illustrations.
An historical novel in continuation of the *Shuo tang chih chuan*. 80 chapters.

484. 海國聞見錄

Hai kuo wên chien lu.

"The Sayings and Doings of Foreign Countries." Relating chiefly to the Islands and Coasts in the Eastern and Southern Oceans. By 陳倫炯 Ch'en Lun-chiung. 1 vol. 2 chüan. 1744. *Ref.* B.M. p. 27.

485. 好逑傳

Hao ch'iu chuan.

"The Fortunate Union." A Novel. 4 vols. 18 chapters. 1787. See Nos. 118, 126. *Ref.* B.M. p. 103; L.U. 21, 2.

486. 休寧縣志

Hsiu ning hsien chih.

A General and Topographical Account of the District of Hsiu-ning, in the Department of Hui-chou Fu, in Kiangnan. 5 vols. 1693.

487. 合錦廻文

Hô chin hui wên.

"Collection of Cryptograms." 6 vols. 16 chüan. 1798. *Ref.* B.M. p. 135; L.U. 27, 5.

488. 護法論

Hu fa lun.

"On protecting Buddhism."

489. 後唐全傳

Hou T'ang ch'uan chuan.

"Chronicles of the After T'ang dynasty." 1736.

490. 花鏡

Hua ching.

By 陳謨子 Ch'ên Hao-tzū. One of the best books on flowers which has appeared during the present dynasty. The last book treats of rearing animals, including some species of insects. 1688.

491. 槐軒千家詩解

Huai hsien ch'ien chia shih chieh.

"Specimens of Poetry, with explanations." 1735.

492. 凰求鳳

Huang ch'iu Fêng.

"The Phoenix in search of a Wife." 2 vols.

493. 灰闌記

Hui lan chi.

Printed in Europe; presented by Stanislas Julien, 1st March, 1833. Apparently the text from which he translated the "Cercle de Craie." 2 copies.

494. 康熙字典

K'ang Hsi tzū tien.

K'ang Hsi's Dictionary. Imperfect. Only vols. 13 and 21—32 incl. See No. 342. Ref. B.M. p. 94.

495. 更豈有此理

K'eng ch'i yu tz'u li.

2 vols. See No. 35.

496. 咬 咽 吧 總 論

Chiao liu pa tsung lun.

A Description of Java. With maps and plates. *Ref.*
B.M. p. 177.

497. 鍾 史 提 綱

Chien shih t'i kang.

4 vols. 1808.

498. 遣 愁 集

Ch'ien ch'ou chi.

"Anti-Melancholia." Being a series of articles on the different studies, &c., which the author considers calculated to dispel grief and melancholy. 4 vols. 12 chüan. *Ref.*
L.U, 109, 5; B.M. p. 13.

499. 羣 眞 著 述

Ch'ün chên chu shu.

A Record of Illustrious Persons. 1680.

500.

Chin-Kang-po-yeh-ho-lin-me Ko, i.e. the *Vadpratchedidika Sutra*, and the *Paramatta Diamond Sutra*.

With an appendix containing the 心經 *Hsin Ching*, or, in full, *No-ho-po-ye-po-lo-me-hsin-ching* (*Paramitahridya Sutra*). Embroidered, and presented, by the faithful female disciple 崔孫.

501. 經 世 緒 言

Ching shih hsü yen.

10 vols. 9 chüan. 1830.

502. 故 事 尋 源

Ku shih hsün yüan.

5 vols.

503. 古玉圖

Ku yū t'u.

An Illustrated Collection of Precious objects of Antiquity.
vols. 1—20 inclusive. 1779. *Ref.* B.M. p. 326. See
No. 456.

504. 繪圖

Kuai yüan.

7 vols. 16 sections. 1774.

505. 路加傳福音書

Lu chia chuan fu yin shu.

The Gospel according to St. Luke, in Chinese. Printed
at the American Mission Press. No date.

506. 祿嗣祕訣

Lu ssü pi chüeh.

507. 龍圖公案

Lung t'u kung ngan.

2 vols. 10 chüan. 1816. *Ref.* B.M. p. 148. See No. 84.

508. 雷峰塔

Lei fêng t'a.

"The Story of the Thunder-peak Pagoda." Otherwise
known as the "History of the White Serpent." 8 small vols.
4 chüan. 1772. *Ref.* B.M. p. 149. See No. 23.

509. 雷峰塔

Another edition of the preceding. See No. 23.

510.

The Gospel of St. Matthew, in Chinese. 1st Edition.
London Missionary Society's Press, Shanghai, 1850.

511.

The Gospel of St. Matthew. In Chinese, with Explanatory
Notes. By William Dean. Hong Kong, 1848.

512. 牡丹亭

Mu tan t'ing.

"The Story of the Peony Bower." 4 vols. See No. 21.

513. 南柯記

Nan ko chi.

"An Account of the Kingdom of Nan-ko," from "A Collection of Reprints of works written during the T'ang dynasty" (A.D. 618—905). 2 vols.

514. 南北通曉雜字

Nan pei t'ung hsiao tsa tzü.

2 vols.

515.

The Pentateuch, in Chinese. Printed at Ningpo. 1 vol. 1846.

516. 北宋志

Pei Sung chih.

"The History of the Northern Sung dynasty." *Ref.* B.M. p. 165.

517. 博古圖

Pō ku t'u.

"An Illustrated Collection of Antiquities." Compiled by 王黼 Wang Foo, and others. 2 cases, vols. 1—6, and 7—12. *Ref.* B.M. p. 228; I.O.C. p. 2. See No. 470.

518. 駁案新編

Pō ngan hsin pien.

Cases which have been brought before the High Court of Justice for Revision of Judgment. New edition. 2 cases, 20 vols. See No. 156.

519. 三禮圖

San li t'u.

Illustrations of the Vessels, Ornaments, &c., referred to in the "Three Rituals." 2 vols. 1676. This once expensive work, reproduced by the photo-lithographic process, is now sold cheaply in Shanghai. *Ref.* B.M. p. 28; L.U. 71, 5.

520. 三字經

San tzü ching.

"The Three-character Classic." The first book put into the hands of a Chinese schoolboy, being a short guide to ethics, history, science, biography, etc., all in one. So called because arranged in rhyming sentences of three words to each. Composed during the Sung dynasty, by 王伯厚 Wang Pö-hou. This work, together with the *Thousand-character Essay* (see No. 467) has been translated into French by Stanislas Julien, and into English (metrically) by H. A. Giles.

521. 三字經訓詁

San tzü ching hsün ku.

"The Three-character Classic" explained. By 王伯厚 Wang Pö-hou, and 王普升 Wang Chin-shêng.

522. 三字經訓詁

San tzü ching hsün ku.

"The Three-character Classic," explained and copiously annotated. By 王伯厚 Wang Pö-hou.

523. 傷寒論

Shang han lun.

"Discourses on Catching Colds." By Chang Chi 張機. 5 vols. 16 chüan. 1780. *Ref.* B.M. p. 8. See No. 267.

524. 禪門日誦全集

Ch'an mén jih sung ch'üan chi.

A complete Collection of Buddhist Daily Chants. By the Priest 默持 Mò Ch'ih. *Ref.* B.M. p. 156; L.U. 81, 3; I.O.C. p. 43.

525. 聖傷默想

Shêng shang mō hsiang.

"Silent Meditations on the Sacred Wounds." A Roman Catholic work. 1 vol.

526. 聖書小云

Shêng shu hsiao yün.

"Notes on the Holy Books." A Japanese and Chinese work.

527. 聖諭廣訓

Shêng yü kuang hstün.

"The Maxims of the Emperor K'ang Hsi," amplified by his successor, Yung Chêng. 1724. See No. 319.

528. 贖罪之道傳

Shu tsui chih tao chuan.

"A Story illustrating the Doctrine of the Redemption." By Carl F. Gutzlaff. 2 chüan. 1834. *Ref.* B.M. p. 68.

529. 說岳全傳

Shuo Yō ch'üan chuan.

The complete narrative of Yō Fei, the patriot general who served so faithfully under the Sung dynasty, and who was wrongfully put to death at the instigation of his rival, 秦檜 Ch'in Kuei. 10 vols. 20 chüan. 80 hui. 1793. *Ref.* B.M. p. 212.

530. 新增資治新書

Hsin tsêng tzü chih hsin shu.

A work on Political Economy, embracing a variety of topics pertaining to the authority of the Legislature and the well-being of the people. 7 vols. *Ref.* Kidd, p. 23.

531. 新約全書

Hsin yō ch'üan shu.

The New Testament, translated into the Mandarin Colloquial style. Shanghai. 1856. *Ref.* B.M. p. 2.

532. 新約全書

Hsin yǒ ch'üan shu.

The Delegates' version of "The New Testament." Shanghai. 1866. Executed by delegate members from the various Protestant Missionary Societies in China. The style is professedly high-class; but the result is for the most part either unintelligible or obscure. *Ref. B.M. p. 2.*

533. 性理精義

Hsing li ching i.

"The Essence of works on Mental Philosophy." Compiled by a Commission, by order of the Emperor K'ang Hsi (1662—1723). 6 vols. *Ref. B.M. p. 128.*

534. 搜神記

Sou shên chi.

"Handbook of Mythology." By 干寶 Kan Pao. 3 chüan. See No. 410. *Ref. B.M. p. 94.*

535. 事類賦

Shih lei fu.

"A Classified Literary Encyclopædia." By 吳淑 Wu Shu. 2 cases, 14 vols. 40 chüan. 1801. *Ref. B.M. p. 244.*

536. 四書人物考

Ssü shu jen wu k'ao.

The Men and Things of the "Four Books," examined. 6 vols. 1739. *Ref. B.M. p. 194.*

537. 四書題鏡

Ssü shu t'i ching.

A Mirror of Themes from the "Four Books." 16 chüan. 1744.

538. 大學

Ta hsüo.

"The Great Learning" (presented by Dr. Cornwall, 4th December, 1833). 1816. *Ref.* B.M. p. 193. See No. 337.

539. 大悲八十四尊現相寶懺

Ta pei pa shih ssu tsun hsin hsiang pao ch'an.

540. 大乘妙法蓮華經

Ta shêng miao fa lien hua ching.

"The Lotus-flower Sutra."

541. 大英國統志

Ta ying kuo t'ung chih.

A History of England, in Chinese. By the Rev. Charles Gutzlaff. Illustrated with portraits of the Georges.

542. 太平廣記

Tai p'ing kuang chi.

Extensive Records compiled during the reign of the Emperor T'ai Tsung. By 李昉 Li Fang. 6 cases, 40 vols. *Ref.* B.M. p. 122.

543. 代數學

Tai shu hsüo.

A translation of De Morgan's Algebra, made by A. Wylie, October 1859.

544. 桃園結義章程

Tao yüan chieh i chang ch'êng.

"By-laws of the Ancient Peach Garden Association." A thin vol. in MS.

545. 天文畧論

T'ien wên lüeh lun.

"A Digest of Astronomy." By B. Hobson. Canton. 1849. *Ref.* B.M. 202.

546. 千手千眼大悲心咒懺法

Ch'ien shou ch'ien yen ta pei hsin chou ch'an fa.

The Confessional Services of the Great Compassionate Kwan-yin, possessing a thousand hands and a thousand eyes. Edited by the Priest 竭誠 Chieh Ch'êng. *Ref.* B.M. p. 100.

547. 靖逆記

Ching ni chi.

"An account of the suppression of banditti in Shen-si, and other parts, in 1813." By 蘭綬 Lan I, the historian. 1821. *Ref.* B.M. p. 118; Kidd, p. 9.

548. 慈雲走國全傳

Tz'ü yün tso kuo ch'üan chuan.

"A Complete Narrative of the Wanderings of Prince Tz'ü yün." An historical romance referring to events supposed to have taken place during the Sung dynasty. 8 chüan (1st missing). 1815. *Ref.* B.M. p. 221.

549. 東西洋考每月統記傳

Tung hsi yang k'ao mei yüeh t'ung chi chuan.

"A Monthly Periodical of Foreign and Domestic News." Edited by the Rev. C. F. A. Gutzlaff. Contains 1833, moons 7th, 8th, 9th, 10th, 11th, 12th, 1st, and 2nd. 1833. *Ref.* B.M. p. 164.

550. 二度梅傳

Erh tu mei chuan.

"The Story of the Two Plums." A work of fiction in the colloquial style. Illustrated. 6 chüan. 1800. See No. 37. *Ref.* B.M. p. 155; Kidd, p. 55.

551. 外海紀要

Wai hai chi yao.

1828.

552. 萬壽盛典

Wan shou shêng tien.

These volumes belong to a work of this name, which is a Record of a Jubilee Celebration of the 80th birthday of the Emperor K'ang Hsi. The work is in 120 chüan. It is in the library of University College, 124-5, but is minus the very volumes of plates here present. Chüan 41-42 only. 2 vols. of plates. Ref. L.U. 124-5.

553. 幼學淺解問答

Yu hsüo ch'ien chieh wên ta.

"Easy questions and answers for young scholars." 1847.

554. 易經

Yi ching.

2 vols. 1781. For details, see No. 307.

555. 瀛環志畧

Ying huan chih lüeh.

"A Geographical Treatise on all within the circuit of the Seas." By 徐繼畲 Hsü Chi-yü. 6 vols. 10 chüan. 1848. Ref. B.M. p. 174.

556. 嘆咭喇國新出種痘奇書

Ying chieh li kuo hsin ch'u chung tou ch'i shu.

"A new English Treatise on Vaccination." 1806.

557. 漁家樂

Yü chia lê.

"The Pleasures of Angling." 4 vols.

558. 玉嬌梨

Yü chiao li.

"The Romance of the Two Cousins." 4 vols. 20 hui.
1782. See No. 45.

559. 御纂歷代三元甲子編年

Yü tsuan li tai san yüan chia tzū pien nien.

Chronological list of the three first Graduates at the
triennial examination for the Han-lin, or Imperial Academy.

560. 粵謳

Yüeh ngou.

Canton Songs. 1828.

561. 玉堂字彙

Yü t'ang tzū hui.

The "Jade Hall" Dictionary. 3 vols. *Ref. B.M. p. 155.*

562. 雍正上諭

Yung Chêng shang yü.

"Imperial Edicts" of the Emperor Yung Chêng (A.D.
1723—36). 24 vols. 4 cases. 1729.

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- 477 正字千文 *Chêng tsü ch'ien wên*, p. 84.
- 148 正字通 *Chêng tsü t'ung*. Amherst II, F 20—22; China II, F 6—9, pp. 26, 43, 84.
- 15 真靈交 *Chên luan chiao*. Amherst II, A 11, p. 3.
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- 496 咬啣吧總論 *Chiao liu pa tsung lun*, p. 87.
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- 208 色戒錄 *Sê chieh lu*. China III, B 3; III, F 8, pp. 36, 45.
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- 224 傷寒辨證錄 *Shang han pien cheng lu*. China II, C 10-11, p. 38.
- 267 傷寒三書合璧 *Shang han san shu ho pi*. China III, F 9, p. 45.
- 103 山海經 *Shan hai ching*. Amherst II, D 14; China III, C 8—11, pp. 18—39.
- 30 蜃中樓 *Shên chung lou*. Amherst II, A 26, p. 6.
- 24 聖教日課 *Shêng chiao jih k'o*. Amherst II, A 20, p. 4.
- 525 聖傷默想 *Shêng shang mò hsiang*, p. 90.
- 255 聖書 *Shêng shu*. China II, F 11, p. 43.
- 526 聖書小云 *Shêng shu hiao yün*, p. 91.
- 319 聖諭廣訓 *Shêng yü kuang hsün*. Elgin I, E 4; Staunton II, F 9, pp. 55, 78, 91.
- 91 神仙通鑑 *Shên hsien tung chien*. Amherst I, D 3—7; China I, E 6-7, pp. 16, 41.
- 59 蜃樓志 *Shên lou chí*. Amherst II, B 18; II, C 13; Pottinger, A 1, pp. 11, 15, 60.

- 105 神天聖書 *Shén t'ien shéng shu.* Amherst I, E 1—3, p. 18.
- 179 藥氏醫按 *Shé shih I ngan.* China II, A 5—8, p. 31.
- 346 射鷹樓詩話 *Shé ying lou shih hua.* Macartney V, 9, p. 60.
- 242 史記 *Shih chi.* China III, E 1—4; III, E 5—7, p. 41.
- 283 詩經體註 *Shih Ching t'i chu.* China III, G 12, p. 48.
- 241 適情雅趣 *Shih ch'ing ya ch'ü.* China II, E 9; Elgin I, A 10, pp. 41, 49.
- 49 史記通鑑 *Shih Chi Tung Chien.* Amherst II, B 4—7, p. 9.
- 69 十二種曲 *Shih êrh tsung ch'ü.* Amherst I, C 10—12, p. 12.
- 358 十二樓 *Shih êrh lou.* Pottinger, A 9, p. 62.
- 362 詩法入門 *Shih fa fu mén.* Pottinger, A 13, p. 62.
- 195 試賦歷則 *Shih fu li tsê.* China II, B 2, p. 34.
- 123 十國春秋 *Shih kuo ch'un ch'iu.* Amherst I, F 5, p. 22.
- 535 事類賦 *Shih lei fu,* p. 92.
- 330 十子全書 *Shih tsü ch'üan shu.* Elgin II, G 10-11, p. 57.
- 196 時文脩法 *Shih wên pei fa.* China II, B 3, p. 34.
- 142 時文筆譜 *Shih wên pi p'u.* Amherst II, F 13, p. 25.
- 182 詩韻珠環 *Shih yün chu chi.* China II, A 11, p. 32.
- 116 詩韻含英題解辨同合訂 *Shih yün han ying t'i chieh pien t'ung ho ting.* Amherst II, E 11, p. 20.
- 440 說文真本 *Shuo wên chên pên.* Staunton II, E 9, p. 77.

- 54 雙鳳奇 *Shuang fêng ch'í*. Amherst II, B 12; Pottinger, F 13, pp. 10, 66.
- 146 數求聲, 品字箋 *Shu ch'iu shêng, and P'in tzu chien*. Amherst II, F 18, p. 25.
- 176 書經 *Shu ching*. China II, A 1; II, G 5-6; Macartney III, 13, pp. 30, 47, 59.
- 263 書經體註 *Shu ching t'i chu*. China III, F 5, p. 45.
- 315 書畫譜 *Shu hua p'u*. Elgin II, D 1-6, p. 55.
- 106 水滸傳 *Shui hu chuan*. Amherst I, E 4-5; II, E 15-16; I, G 4-6; Macartney III, 8-9; Pottinger, E 3, pp. 19, 21, 26, 58, 65.
- 90 說鈴 *Shuo Ling*. Amherst I, D 1-2, p. 16.
- 46 說岳傳 *Shuo Yō chuan*. Amherst II, B 1, p. 9.
- 529 說岳全傳 *Shuo Yō ch'üan chuan*, p. 91.
- 528 贖罪之道傳 *Shu tsui chih tao chuan*, p. 91.
- 300 搜神記 *Sou shên chî*. Elgin II, B 13; Staunton II, B 11, pp. 52, 71, 92.
- 160 四庫全書 *Ssü k'u ch'üan shu*. Amherst II, H 5, p. 28.
- 133 四書 *Ssü shu*. Amherst II, F 4; China II, A 9; I, F 1; II, F 3; II, F 12; II, F 15, pp. 24, 31, 42, 43, 44.
- 270 四書合講 *Ssü Shu ho Chiang*. China I, G 1; I, G 2; Staunton I, G 5; I G 7, pp. 46, 80, 81.
- 100 四書匯參 *Ssü shu hui ts'an*. Amherst II, D 8-11, p. 18.
- 536 四書人物考 *Ssü shu jen wu k'ao*, p. 92.
- 303 四書人物備考 *Ssü shu jen wu pei k'ao*. Elgin I, C 11, p. 52.
- 109 四書題錢 *Ssü shu t'i ching*. Amherst I, E 10, pp. 19, 92.
- 135 算法統宗 *Suan fa t'ung tsung*. Amherst II, F 6; Staunton II, A 11, pp. 24, 57.

- 5 蘇黃尺牘 *Su huang ch'ih tu.* Amherst II, A 1, p. 2.
- 28 宋詩別裁 *Sung shih pieh ts'ai.* Amherst II, A 24, p. 5.
- 295 素問 *Su wen.* Elgin II, A 11, p. 50.
- 107 大清摺紳全書 *Ta ch'ing chin shên ch'üan shu.* Amherst I, E 6-8; I, G 8, pp. 19, 27.
- 231 大清會典 *Ta Ch'ing hui tien.* China I, D 1-11 to II, D 1-9; II, D 13; Staunton II, D 5-7, pp. 39, 40, 74.
- 158 大清律例 *Ta ch'ing lü li.* Amherst II, H 1-2; China III, A 1-3; Staunton I, B 8-9, pp. 27, 32, 69.
- 443 大佛頂首楞嚴經隻記 *Ta Fo ting shou Lêng Yen Ching chi chi.* Staunton I, F 13, p. 78.
- 331 大和名所圖會 *Ta ho ming so t'u hui.* Elgin II, G 12, p. 57.
- 337 大學中庸 *Ta Hsüo. Chung Yung.* Macartney III, 12, pp. 58, 93.
- 296 太玄別調 *T'ai hsüan pieh hsün.* Elgin II, A 12, p. 51.
- 4 太平廣記 *T'ai p'ing kuang chi.* Amherst I, A 6-11, pp. 1, 93.
- 321 太平御覽 *T'ai p'ing yü lan.* Elgin I, E 6, to II, E 4, p. 56.
- 543 代數學 *Tai shu hsüo,* p. 93.
- 448 太素脉 *T'ai su mö.* Staunton II, F 12, p. 79.
- 444 大六壬大全 *Ta liu jen ta ch'üan.* Staunton I, F, 14-15, p. 78.
- 7 大明傳 *Ta ming chuan.* Amherst II, A 3, p. 2.
- 439 大明會典 *Ta ming hui tien.* Staunton II, E 3-8, p. 77.
- 73 唐詩合解箋注 *T'ang shih hō chieh chien chu.* Amherst I, C 16, p. 13.

- 154 唐人說薈 *T'ang jen shuo wei*. Amherst II, G 1—4, p. 27.
- 396 唐律疏義 *T'ang lü su i*. Staunton I, B 3 4, p. 68.
- 371 唐平鬼全傳 *T'ang p'ing kuei ch'üan chuan*. Pottinger, C 3, p. 63.
- 127 唐宋文醇 *T'ang Sung wen shun*. Amherst I, F 10-11, p. 23.
- 469 談天 *T'an t'ien*. Staunton II, G 2, p. 82.
- 55 桃花扇傳奇 *Tao hua shan chuan ch'i*. Amherst II, B 13; I, E 9, pp. 10, 19.
- 202 道德經 *Tao té ching*. China II, B 9; Staunton II, G 11, pp. 35, 83.
- 145 道德經解 *Tao té ching chieh*. Amherst II, F 17, p. 25.
- 387 濤杙閒評 *Tao wu hsien p'ing*. Staunton I, A 1, p. 66.
- 544 桃園結義章程 *Tao yüan chieh i chang ch'êng*, p. 93.
- 539 大悲八十四尊現相寶懺 *Ta pei pa shih ssü tsun hsein hsiang pao ch'an*, p. 93.
- 540 大乘妙法蓮華經 *Ta shêng miao fa lien hua ching*, p. 93.
- 541 大英國統志 *Ta ying kuo t'ung chih*, p. 93.
- 301 條例約編 *Tiao lí yô pien*. Elgin I, C 1—8, p. 52.
- 353 天花淚批評 *T'ien hua ch'êng p'i p'ing*. Pottinger, A 4, p. 61.
- 368 天花藏 *T'ien hua tsang*. Pottinger, B 9, p. 63.
- 209 天崇欣賞 *T'ien tsung hsin shang*. China III, B 4, p. 86.
- 285 天文曆理 *T'ien wên lí lí*. Elgin I, A 2, p. 48.
- 545 天文畧論 *T'ien wên lüeh lun*, p. 94.
- 96 天雨花 *Tien yü hua*. Amherst II, D 1—3, p. 17.
- 377 地理備考 *Ti lí pei k'ao*. Pottinger, D 4, p. 64.

- 7 定鼎奇文 *Ting ting ch'i wén.* Amherst II, A 3, p. 2.
- 138 豆棚閒話 *Tou p'êng hsien hua.* Amherst II, F 2, p. 24.
- 402 艸字彙 *Ts'ao tsü hui.* Staunton II, B 2, p. 69.
- 82 增智裏補 *Tséng chih hsiang pu.* Amherst II, C 10, p. 15.
- 132 增補遺愁集 *Tséng pu ch'ien ch'ou chi.* Amherst II, F 3, p. 23.
- 332 曾文正公 *Tséng wén chéng kung.* Macartney I, II, p. 57.
- 233 左繡 *Tso hsiu.* China II, D 12; Staunton I, B 5, pp. 40, 68.
- 437 杜工部集 *Tu kung pu chi.* Staunton II, E 1, p. 76.
- 318 都名所圖會 *Tu ming so t'u hui.* Elgin I, E 3, p. 55.
- 3 東周列國全志 *Tung Chou lieh kuo ch'üan chih.* Amherst I, A 5; Pottinger, E 4, pp. 1, 65.
- 131 通鑑綱目 *Tung chien kang mu.* Amherst II, F 1-2; I, J 8-9; China II, E 1-8; I, G 3-5; II, G 1-4, pp. 23, 28, 41, 46, 47.
- 412 東西漢全傳 *Tung hsi Han ch'üan chuan.* Staunton II, B 13, p. 72.
- 431 東西洋考 *Tung hsi yang k'ao.* Staunton II, D 12, p. 75.
- 442 東華錄 *Tung hua lu.* Staunton I, F 9-12, p. 78.
- 549 東西洋考每月統記傳 *Tung hsi yang k'ao mei yüeh tung chi chuan,* p. 94.
- 361 東北遊記 *Tung pei yü chi.* Pottinger, A 12, p. 62.
- 466 東坡遺意 *Tung p'ö i i.* Staunton I, G 11 d, p. 82.
- 467 同文千字文 *Tung wén ch'ien tsü wén,* Staunton I, G 12, p. 82.

- 359 度生公案 *Tu shéng kung ngan*. Pottinger, A 10, p. 62.
- 75 讀史論畧 *Tu shih lun lüè*. Amherst II, C 2, Pottinger, B 5, p. 13, 62.
- 12 紫欽記 *Tz'ü ch'ái chí*. Amherst II, A 8, p. 3.
- 101 資治新書 *Tz'ü chih hsín shu*. Amherst II, D 12, p. 18.
- 210 詞學全書 *Tz'ü hsüè ch'üan shu*. China III, B 5, p. 36.
- 124 字彙 *Tz'ü Hui*. Amherst I, F 6-7; China III, G 4-5, pp. 22, 48.
- 57 子不語 *Tz'ü pu yü*. Amherst II, B 16, p. 11.
- 548 慈雲走國全傳 *Tz'ü yünn tsou kuo ch'üan chuan*, p. 94.
- 551 外海紀要 *Wai hai chí yao*, p. 95.
- 134 萬法燭宗 *Wan fa kuei tsung*. Amherst II, F 5, p. 24.
- 438 萬善同歸 *Wan shan t'ung kuei*. Staunton II, E 2, p. 77.
- 273 萬壽衢歌樂章 *Wan shou ch'ü ko yè chang*. China I, G 6, p. 46.
- 552 萬壽盛典 *Wan shou shéng tien*, p. 95.
- 352 文章游戲 *Wén chang yü hsi*. Pottinger, A 3, p. 61.
- 136 文法入門 *Wén fa ju mén*. Amherst II, F 7, p. 24.
- 407 文公家禮正衡 *Wén Kung chia lí chéng hêng*. Staunton II, B 7, p. 70.
- 43 文帝全書內函 *Wén Ti ch'üan shu nei han*. Amherst I, B 10; II, E 14, pp. 8, 21.
- 297 武夷山志 *Wu I shan chíh*. Elgin II, A 13, p. 51.
- 465 無雙譜 *Wu shuang p'u*. Staunton I, G 11 c, p. 81.
- 398 婺源縣志 *Wu yüan hsien chíh*. Staunton I, B 6-7, p. 68.

- 269 羊城古鈔 *Yang ch'êng ku ch'ao*. China III, F 14, p. 46.
- 556 嘆咭喇國新出種痘奇書 *Ying chieh li kuo hsin ch'u chung tou ch'i shu*, p. 95.
- 50 夜譚隨錄 *Yeh tan sui lu*. Amherst II, B 8; I, C 14, pp. 9, 13.
- 174 易經 *Yi ching*. China II, A 1; Elgin II, C 12; Macartney III, 13; Staunton II, B 1, pp. 30, 53, 59, 69, 95.
- 139 一歹話 *Yi hai hua*. Amherst II, F 10, p. 24.
- 454 瀛環志畧 *Ying huan chih lüeh*. Staunton I, G 1, pp. 80, 95.
- 199 音漢清文鑑 *Yin han ch'ing wên chien*. China II, B 6, p. 34.
- 128 印譜 *Yin p'u*. Amherst I, F 12, p. 23.
- 226 一統志 *Yi t'ung chih*. China III, C 1—4; Elgin I, D 8—11, pp. 38, 54.
- 298 淵鑑類函 *Yüan chien lei han*. Elgin I, B 1 to II, B 10; I, G 7—11; II, G 1-2, pp. 51, 57.
- 340 *Yüan jen pi chung*. Macartney IV, 1—6, p. 59.
- 419 元人百種曲 *Yüan jen pò tsung ch'ü*. Staunton II, C 2—5, p. 73.
- 348 圓天圖說 *Yüan t'ien t'u shuo*. Macartney V, 11, p. 60.
- 38 漁家樂 *Yü chia lé*. Amherst II, A 34, pp. 7, 95.
- 45 玉嬌梨 *Yü chiao li*. Amherst I, B 13; II, B 9; II, B 10; Macartney III, 7, pp. 9, 96.
- 166 御製曆象考成 *Yü chih li hsiang k'ao ch'êng*. China I, A 1, p. 29.
- 441 御製增訂清文鑑 *Yü chih tsêng ting ch'ing wên chien*. Staunton I, F 1—8, p. 78.
- 355 虞初續志 *Yü ch'u hau chih*. Pottinger, A 6, p. 61.
- 215 粵中見聞 *Yüeh chung chien wên*. China III, B 11, p. 36.

- 560 粵謳 *Yüeh ngou*, p. 96.
- 121 粵東筆記 *Yüeh tung pi chi*. Amherst II, E 17, p. 22.
- 553 幼學淺解問答 *Yu hsüo ch'ien chieh wên ta*, p. 95.
- 181 幼學句解 *Yu Hsüo Chü Chieh*. China II, A 10, p. 31.
- 216 幼學古事 *Yu hsüo ku shih*. China III, B 12, p. 37.
- 225 幼學古事瓊林 *Yu hsüo ku shih ch'üing lin*. China II, C 12, p. 38.
- 451 玉歷鈔傳警世 *Yü li ch'ao chuan ching shih*. Staunton II, F 14 b, p. 79.
- 416 韻府羣玉 *Yün fu ch'ün yü*. Staunton I, C 8-9, p. 72.
- 322 韻府拾遺 *Yün fu shih i*. Elgin II, E 5—8, p. 56.
- 294 雍正上諭 *Yung Chêng shang yü*. Elgin II, A 7—10, p. 50, 96.
- 115 詠物詩選註釋 *Yung wu shih hsüan chu shih*. Amherst II, E 10, p. 20.
- 188 韻雅 *Yün ya*. China III, A 7, p. 33.
- 14 玉搔頭 *Yü sao t'ou*. Amherst II, A 10, p. 3.
- 58 玉堂字彙 *Yü T'ang Tsü hui*. Amherst II, B 17, pp. 11, 96.
- 343 御纂醫宗金鑑 *Yü tsuan i tsung chin chien*. Macartney V, 2—6, p. 59.
- 559 御纂歷代三元甲子編年 *Yü tsuan li tai san yüan chia tsü pien nien*, p. 96.



ART. II.—*Book of the King's Son and the Ascetic.* By E.
REHATSEK.

THE striking fact that the Buddha has been officially enrolled in the list of the saints of the Christian Church has very naturally attracted much attention to the book to which this strange result is due. This book, a romance in Greek, founded on some unknown Buddhist life of the Buddha, was ascribed in some of the later MSS. to St. John of Damascus, and this was the view held by scholars until the publication in 1886 of the masterly monograph by M. H. Zotenberg (*Notices sur la livre de Barlaam et Joasaph*). He there shows conclusively that the John who was the author of the romance was not John of Damascus, but a monk of the convent of St. Saba near Jerusalem, who wrote it in the commencement of the seventh century A.D. This romance, whose hero, though really the Buddha, appealed so strongly to the sympathies of the Christians, that they raised him to the rank of a saint, contains, besides the description of the life and character of the hero, a number of fables, some of which have been traced back to the Buddhist Jātaka book, while the source of others is still unknown. This being so, it becomes of great importance to ascertain the earliest form of the story. Now it is admitted that the numerous versions of it in various European languages (of which a list is given in my '*Buddhist Birth Stories*,' vol. i. pp. xcv and foll.) are all derived from the Greek of John of St. Saba. There is

also an Arabic version, written in prose by a Christian, which M. Zotenberg has shown to have been based on the Greek text (*loc. cit.* pp. 79-81). This was imitated in an Arabic poem written by a Muhammadan, and now lost, and this again gave rise to a Hebrew prose work called 'The Prince and the Ascetic.'

At the Oriental Congress held at Vienna in 1888, Dr. Fritz Hommel read a paper on a prose Arabic version of the story, written by a Muhammadan, and described already in 1858 by Dr. Blan from a MS. in the possession of the German Oriental Society. In the Transactions of the Congress Dr. Hommel published the text of this version (also entitled 'The King's Son and the Ascetic'), which he believes to be translated directly from an original Pahlavi version, and to be entirely independent of the Greek romance. M. Zotenberg, on the other hand, holds this version also to be based on the Arabic poem mentioned above. This work is now presented in English to our readers in a version by Mr. Rehatsek, of Bombay, and following, it is to be presumed, the Arabic text as published by Dr. Fritz Hommel.

It would be unnecessary to point out either the utility or the interest of this labour for which we are indebted to Mr. Rehatsek. It can of course throw no light on the still unsolved problem as to when and where the hero of the story, the Buddha, was canonized as a Christian saint. But on the other two questions which await solution, that is to say, the early migration of the romance itself, and the relation of the fables it contains to the Buddhist Jātaka stories, it is of the greatest importance.

I would venture to call attention here to a very interesting discussion of the history of the romance, written from

the strictly Catholic point of view by M. Emmanuel Cosquin, in the 'Revue des questions historiques' for October, 1880. Professor Max Müller's paper on it in his 'Selected Essays,' and my own summary in the Introduction to my 'Buddhist Birth Stories,' may also be mentioned.

T. W. RHYS DAVIDS.

Book of the King's Son and the Ascetic.

In the name of Allah the merciful the clement! This is an abridgment from the book of one of the distinguished philosophers of India. It is a book of eloquent allusions, pleasing instructions, and beautiful meanings [or ideas]; may Allah cause us to profit thereby. Amen!

The author of it has recorded that there was in the country of India a great king, who, on account of his extreme love for the world, was turned away from contemplating eternity so ardently towards [the affairs of] his kingdom, that there was no one who dared to find fault with him. He alienated the adherents of the [Buddhist?] religion, and attracted the adherents of the idols. Having one day made inquiries about a man of the people of his kingdom whom he had been in the habit of consulting, he was informed that he had verily abandoned the world, his family, his property, and had joined the [community of] ascetics. This greatly astonished the king, who then sent for the man, who on making his appearance, and being seen in the condition of asceticism, was reproved by the king as follows: "Whereas thou hast been one of the grandees of my kingdom, thou hast [now] debased thy soul, hast separated thyself from thy family and hast sought vanity." The ascetic replied: "O king! Although thou art under no obligation to me, it is nevertheless incumbent upon thee to listen to my words without anger, and then to act as thou deemest suitable; because anger is a foe to intellect, since it is a bar between

him who is under its influence, and between what he is to hear and to understand." The king replied: "Speak!" The ascetic then continued: "Is the guilt of which thou accusest me to redound upon me, or upon thee?" He said: "Upon thee and upon me; for, when any man wishes to commit suicide, I must not leave him the option to do so. I consider the destruction of his life [to be] like the destruction of any other man's life, because I am his protector and the judge for and against him. Accordingly I judge thee and punish thee for destroying a life of my subjects, which is thy own life; for the loss and grief thou hast brought upon thy family." The ascetic rejoined: "I do not think thou canst punish me except by arguing, and an argument can be established only by judges. Although at present no human judges can trouble thee, thou possessest two of them, to one of whom I agree to submit." He asked: "Who are these two?" The ascetic continued: "He to whose decision I shall submit is thy intellect, but he from whom I desire to be excused is thy wrath." The king replied: "Say what thou listest, but give me some information, and tell me since when thou art of this opinion, and who has helped thee thereto?" The ascetic continued: "As to my information, it is that in my young years I heard one word which fell into my soul, and became like seed sown; it then grew and prospered till it became the tree which thou beholdest. I had namely heard a speaker say that 'a fool considers that which is a thing to be nothing, and that which is nothing to be a thing. He who does not scorn that which is nothing will not obtain that which is a thing. He who does not look upon that which is a thing, will not rejoice his soul by abandoning that which is nothing. The thing is eternity, and that which is nothing is the world.' This statement had impressed me, but it, and the prompting thereby, as well as the contemplation thereof, were overpowered by lusts, until the world appeared to me, as I believed it in my folly to be, a thing, whereas it is nothing; since it has shown to me that its life is death, its wealth is poverty, its joy is grief, its satiety is hunger, its health is disease, its strength is weak-

ness, its honour is degradation, its pleasure pain. And why should not its life be death, since the tendency of life therein is towards death; and why should its wealth not be destitution, since no one gains anything therefrom without the need of something else, in order to make it serviceable in the same way as the owner of a beast requires the food for it, the price for it, the binding place [*i.e.* stable] for it, and the utensils for it. Then, in order to utilize all these things, he stands in need of something else, so that when destitution is removed, and none befalls him from his family and property, and [from] necessity, he is beset by other wants. And how should not its joy be grief, since it [*i.e.* grief] is lying in wait for every one whom gladness has befallen from it in order to pursue him with grief: nor is any one addicted to the world secure, when he experiences a joyful event, that this very event will not result in a calamity to him. If then it be unavoidably necessary to become severed from family, children, and property, and this separation takes place forcibly in ways accompanied by many evils, is it not more worthy, with reference to all the just-mentioned things, that an intelligent man should abandon them voluntarily, before any of the just-noticed ways, which often take place, befall him, and he should not be grieved if he has obtained it [*i.e.* worldly prosperity], nor ought he, on the contrary, to wish for it, and covet it, if he has not obtained it. And how should not its repletion be hunger, since it kindles [thirst] in the body, and if he finds no water to quench it therewith, it consumes his body, and if he prevents it from consuming his body, by nourishing the latter with food and drink, this will be strength for the repetition of a similar kindling; and the habit of repletion is [followed by] weakness in hunger. And how should its health [*i.e.* of the body] not be malady, since its health depends upon the equilibrium of the agglomerated humours of it, which are antagonistic in their qualities; and the [substance] most closely connected with life is the blood, as well as the most evident. The blood is most closely connected with sudden death, with pestilence, with angina, with quinsey, with cancer, and with pleurisy.

And how should its strength not be weakness, since it is necessarily subject to dissolution? And how should its honour not be degradation, since we never see in it an honour but it terminates with removal, and what degradation is worse than removal from honour? And how should its pleasure not be pain, since it is [only] the cessation of pain, and terminating in the briefest period of time, is followed by that pain which it had just caused to cease, and when we consider this [succession of pleasure and pain] in the lives of kings, and their terminations, we find the days of their honour short in comparison to the days of their degradation, and the degradation of their terminations. And, by my life! that man who has received enjoyment from the world ought to despise it more, because it may happen any day that it becomes inimical to his property, family, children, or dignity, or body, or soul. Why should I not despise the world since it again takes away what it bestows, brings on a bad end, despoils him of what it has given him, and brings upon him ignominy; it abases him whom it exalts, and causes him to grieve; it severs connection with its lover, and repentance pursues him; it misleads him who obeys it, and wretchedness pursues him; by its dalliance it invites falling into its snares, and entails fatigue and trouble in [those who strive for] deliverance from it. It is the companion of treachery and the road to destruction; it is the much-stumbling ridden beast and the worn-out ship, the house with many snakes, and the park abounding with beasts of prey. It is considered necessary, but is not necessary to any one; it is the mistress who loves no one; is playing with its companion whilst feeding him, whereas it has destined him to be eaten; and making him its servant whilst pretending to serve him. It makes him laugh, then laughs at him; it insults him, and is then coveted by him; it makes him weep, then weeps for him, and whilst it spreads out its hand for [receiving] a gift, lo! it has spread it out for mendicancy and poverty; it knots [*i.e.* adorns] his head with a crown, then buries his head under ground; it ornaments hands and feet with gold, then shackles them with iron; it seats a man on a throne

one day, and seats him in prison the next. It spreads out for a couch gold brocade to him in the morning, and spreads out for him earth in the evening. It collects for him singers, buffoons, and panegyrists, then it collects upon him [*i.e.* his corpse] persons who sing threnodies, weep and lament; it causes his family to love his presence, then it causes them to love his absence: it perfumes his odour to-day and infests it to-morrow. It fills his soul with its hopes, and his fist with its gifts in the morning, but plunders his soul and his fist in the evening. It is pleased with a change of the whole in everything, and it foists the base into the place of the excellent. It removes a nation from scarcity to plenty, but also from rest to fatigue, and from hunger to repletion, until when this [state of affairs] is reversed plenty is snatched away, a bar is interposed between them and between easy nourishment, so that verily strength is taken away from them after abundance, and they return to the most fatiguing labour.

As to thy words, O king, of my having ruined my family and abandoned it: verily I have neither ruined nor abandoned it, but have joined [myself] to it, and segregated [myself from others] to it; because I was looking [formerly] with a bewitched eye, not distinguishing therewith familiars from strangers, nor foes from friends, when however I obtained a discerning eye, I looked, and lo! those whom I had reckoned to be familiars, companions, and brothers, had become beasts of prey, having no other care than to devour me, or [fear] to be devoured by me. Their difference consisted in proportion of their excellence in strength, some of them being like lions in bravery, or like wolves in rapacity, or like dogs, now barking angrily and now cajoling obsequiously, whilst some were like foxes in deceit and thieving; the intention however was identical, although the mode [of executing it] varied.

If thou wert to consider thy own case, O king, thou wouldst perceive that those of thy family, and those who obey thee, are worse [disposed] towards thee than strangers and distant persons. But as to my present state, I possess

[therein] familiars, brothers, and protectors who love me, and whom I love, so that love is among us, neither lost nor interrupted. They serve me, and I serve them, for wages which do not fail; accordingly the service is never discontinued. All of us aspire to what it is possible to enjoy together; nor is any one of us prohibited from gathering for himself at any time, what another gathers, so that there is neither contention among us, nor envy concerning the manner in which he collects it. These are the professors of [the Buddhist?] religion whom I have joined, and have aspired to safety for my soul as they have [for their own]. But those whom I have spurned and cut off are the adherents of the world, which is nothing, and thou verily knowest its attributes and its acts, so that if thou desirest me to explain 'the thing' prepare to listen to [what I have to say of] it." Then the king said to the philosopher: "Thou discernest nothing, and conquerest [discontent] only by [enduring] transitory wretchedness, and by [entertaining] vain hope, and by [bearing] eventual privation. Depart from my kingdom, for thou art corrupt."

Nativity of the King's Son, may Allah approve of him.

In those days a boy was born to the king, and he was greatly delighted thereat, because he was anxious to possess male offspring. He then assembled the astrologers and the U'lama to prepare a nativity for him, whereon they reported that [the subject of] this nativity would attain a higher station than any king of the kings of the earth. A scholar among them said thereon: "I do not think that the nobility this boy will arrive at will be the kind of nobility that is attained in the [affairs of the] world, and I am of opinion that he will become a leader in asceticism, and of a high degree in religion among the degrees of eternity." Hereon the king's joy at [the birth of] the son disappeared; then by his order a town was set apart for him, and he selected for his service and education trustworthy guardians, whom he summoned to his presence and ordered never to mention among themselves

death or eternity, neither religion nor asceticism, and neither removal [from this world] nor return [to the next world]; and that, if they perceived one of themselves instilling into him doubts or complaints, they should make haste to expel him from among them, so as to cut off from their mouths the mention of the things he had prohibited them to notice. Accordingly when the boy had become able to understand speech, nothing of the kind was uttered by their tongues.

The king happened to possess a wazir who satisfactorily administered his affairs, but the favourites of the king envied him. He [the wazir] went out to hunt, and met a cripple whom he questioned, whereon the latter informed him that he had been maimed by a beast of prey. He said to the wazir: "Attach me to thyself in order to find advantage by me." He then ordered him to be conveyed to his habitation.

The wazir happened to be a true believer [in asceticism], but concealed his faith for a wise purpose. Envious persons then maligned the wazir to the king, [alleging] that he was coveting the kingdom. They said: "Try him by telling him that thou desirest to follow ascetism and to abandon the kingdom, that thou mayest see him encourage thee therein." This they did, because they knew the opinion of the wazir concerning asceticism and the abandoning of the world. When the wazir entered to the king, the latter said: "O wazir! thou hast indeed beheld my greediness for [the affairs of] the world since I have become a man, and verily I have investigated what has past, but find in my hand nothing [profitable] from it, but that which remains [of my life] resembles that which has elapsed, and will certainly also slide away from my hand; wherefore I intend to exert that [assiduity] for eternity, which I have exerted for the world, and for this [purpose] I find no means except to abandon the kingdom and its people, and to embrace ascetic life, and [tell me now] what is thy opinion?" The wazir replied: "O king! That which remains [or is permanent], although it is hoped for, does not [yet] exist, but is worthy to be sought, and that which is perishable, although it exists, is worthy to be rejected." Then the weighty impression this reply had

produced manifested itself on the face of the king, and the wazir returned to his house in fear, not knowing what to do. He then interviewed the cripple, and informed him of what had taken place. The latter replied: "I am of opinion that the king thinks thy intention is to succeed him in his dominions; therefore, when thou risest in the morning, thou must throw away these habiliments of thine, don the garb of asceticism, and shave thy head; then go publicly to the palace of the king. This will astonish the people, who will inform the king about thy state, and he will then call thee and ask thee concerning thy act. Then say: 'This is what thou hast invited me to, because it is proper that he who advises his companion and master to do a thing, should not demur to share it with him. Arise then with us, because I consider that to which thou hast invited me, to be the most rational and most excellent [of pursuits] in which we are [capable of engaging].'"

The wazir did as he was bidden by the cripple, whereon the king vented the anger which was in his soul upon him, and relegated him in his irritation to a place of the ascetics whose habitations were in the hearts of the people [or, who lived in the very midst of the people]. Then he ordered them to be exiled from his whole country, threatening them with death if they refused compliance; accordingly they began to flee and to abscond. The king went out [afterwards] to hunt, and perceiving two men from a distance, he had them brought to his presence, and lo! both were ascetics. Then he asked them why they had delayed leaving. They replied: "We are weak, have no beast, nor provisions." The king said: "Who fears death, let him make haste [to depart] without provisions." They both continued: "We do not fear death, but expect it, and are pleased therewith, but we have abandoned what rejoices the inhabitants of the earth, have left it and do not return to it." He asked: "Then you have really not fled from fear of death?" And they replied: "No! We have fled because we disliked to aid thee against ourselves [*i.e.* to aid thee to get us into thy power]." Then the king ordered them to be burnt, and pro-

claimed the cremation of all ascetics to be found in his dominions. May Allah be pleased with both of them!

Attainment of Puberty by the King's Son.

The son of the king grew most handsomely in body, prospered in his education, and progressed in his learning [under his instructors], but discovered that he was guarded by them from going out, looking, and hearing. Then he said: "Perhaps they know better [than myself] what is good for me;" but when he increased in years, in experience, and in intellect, he said: "I do not see that they possess excellence over me, and I must not allow them the management of my affairs, and I shall leave the option to myself; but I ought to ascertain their opinions, and allow them to participate therein [*i.e.* in the management]." He intended to ask his father why they were surrounding him, and said: "This matter originated only with him, and he has not informed me thereof; but I must ascertain this from one who can be cajoled by promises and frightened by threats." Accordingly he turned to one [of his guardians] with whom he had entertained intercourse; this and his intimacy he augmented, and then said to him: "As thou seest, the king is paying me visits, and the kingdom will [in course of time] devolve upon me, so that thou wilt be in the happiest position if thou obeyest me, and in the worst plight if thou opposest me either immediately or hereafter." Then he learnt the truth from him, and placed trust in his fidelity. Afterwards they conversed more at length, till he informed him of everything, and he thanked him. When the time of his father's visit arrived he said: "Dear father! Verily thou art conscious of the incongruity of my position, and the anxiety of my soul in this confinement! When thou wast in a similar position, thou wast not in this state, and didst not continue therein; change, as thou seest, is continuous." Then his father knew that his imprisonment would only increase his discontent. He said: "My son! I wanted to ward off calamities from thee, so that thou shouldst hear and see only

what pleases thee." Then the king ordered his courtiers to make him ride out [from time to time] in the handsomest manner, and to turn away from his road every evil sight, as also to assemble near him handsome singers. After he had been [thus] riding about often, the people began to be displeased with the trouble of removing the diseased and the cripples from his way. Accordingly they one day made arrangements with two fellows who used to beg together for alms. One of them was swollen, full of tumours, and of evil aspect, lamenting violently; and the other a blind man, who urged his guide to remove him quickly from the road. When the king's son perceived them he was horrified at the spectacle, and asked: "Is it possible that this befalls other men besides these two?" And the reply was affirmative, whereon he gradually began to hate life and to think lightly of the royal power. Afterwards he saw an old man, whom age had bent, whose hair it had blanched, whose skin it had tanned, and changed his forces to weakness. Then he asked: "What is this?" And was told that it is decrepitude. He further queried: "How long does it take a man to reach it?" They said: "A hundred years or so." He asked moreover: "And what follows then?" And being told that death ensues, he continued: "How quickly are days followed by months, and months by years, and years by [the termination of] life; the occupation [which we ought to follow] is different from that which we are engaged in." Then he departed, repeating these words, and the wish for the enjoyment of the world and of its lusts abandoned him.

He met the aforesaid man with whom he had entertained intercourse and intimacy, and asked him: "Knowest thou any persons whose position is different from ours?" He replied: "Yes! The ascetics, who spurn the world and seek eternity. They possess knowledge and words [*i.e.* tenets], but the people are inimical to them, and the king, thy father, has exiled them and burnt them up with fire." Thereon the king's son became like one who is seeking something he had lost, and the fame of his beauty, perfection, understanding, civility, knowledge, and abstention from the world became

known in distant regions, so that it reached an ascetic philosopher in the island of *Sarandib*,¹ whose name was Belavhar. He said: "I must extricate this living man from among the dead." Then he travelled to him, and when he reached the city in which the king's son was, he threw away the garb of asceticism, and donned the costume of merchants. He roamed about the gate of [the mansion of] the king's son, till he made the acquaintance of the chamberlains, and used politeness till he secretly met the aforesaid man who was familiar with the king's son, and said to him: "I am a foreigner from Sarandib, and have arrived with a strange and most noble article; its profit [*i.e.* virtue] is that it cures the sick, causes the blind to see, and strengthens the weak. I find no one more worthy to possess it than the king's son, on account of his beauty and his perfection." He replied: "Thou describest a wonderful thing, and as to thy intelligence, I see no flaw in it, and thy words are beautiful, but I must not mention thy information till I see thy article." He said: "Besides my trading I am also a physician, and see that thy sight is weak; my article has a brilliancy which cures weak sight, but the king's son is young, of strong sight, and I shall see whether he requires this [remedy]." The chamberlain then entered, and informed the king's son about him. The soul of the king's son suggested to him that now his desire for a knowledge of asceticism would be gratified, and he ordered him to be secretly admitted. The philosopher Belavhar brought with him a package containing books, and said that it was his stock-in-trade. When Belavhar entered and the chamberlain went out, the king's son received him in the handsomest manner, honoured him and extolled him. Then Belavhar said: "O son of the king! I verily believe thou hast honoured me more than the people of thy country [have done]." He replied: "On account of the great [information about asceticism] which I hoped for on thy part." He continued: "O son of the king! Thy parable with me

¹ *Sarandib*, *Saripa*, gold-island, in Sanskrit; considered to be Ceylon by Oriental, but Sumatra by Occidental, scholars.

is like the parable of the king who honoured two destitute men on account of his religion."

First of the Parables of Belashar the Ascetic Philosopher.

The king's son asked: "And how was that?" The ascetic replied: "It is on record that there was a king who loved what is good, and was stimulated thereto by [his intercourse with] pious and excellent men. One day, whilst he was going with his courtiers, he passed near two barefooted men, dressed in worn-out garments, but bearing the mark of righteousness and excellence. When he saw them, he alighted from his vehicle [or animal], embraced and honoured them, which [behaviour] displeased his courtiers. The king had a foolish brother who knew not the dignity of the professors of asceticism and of devotion, but he was under his brother and had nothing to do. The companions [*i.e.* courtiers] of the excellent king then went to him and said: 'Verily the king has despised his soul, and has exposed the people of his country to disgrace, by alighting [from his vehicle or horse] for the sake of two wretched men. Therefore reproach him, lest he repeat a similar thing again.' He complied, and when he had terminated his address, he received some kind of a reply, but went away without knowing whether he [the king] had become angry or pleased. Some time afterwards the excellent king commanded the herald of death to make a proclamation at the mansion of his brother, and to beat the drum of death at the gate of his mansion; this being the custom among them when they wished any one to be killed. Thereon the mourning women began their lamentations in the house of the king's brother, and the latter having put on the shroud [of death] proceeded weeping to the house of his brother the excellent king. When he came into his presence he fell on the ground, lamented, and raised his hands for imploration. The king then said: 'What troubles thee, O fool?' He replied: 'Blamest thou me for being troubled when thou proclaimest my death?' He continued: 'Art thou troubled by a herald

who proclaims my orders, whereas I am thy brother, and whereas thou knowest that thou hast not so offended me as to be deserving of death? Then how blamest thou me for being troubled by the herald of my lord when I saw him? And thou hast fallen to the ground, being troubled because I was reminded of that death wherewith I have been threatened since I was born. Depart [from me], therefore, because my wazirs have greatly misled thee, and their error will [soon] appear.' "

Parable of Four Boxes, good and bad.

The ascetic said: "Then the king issued orders, and four boxes were made for him. Two of them he besmeared with gold-water, and two with pitch; then he filled the latter with gold and jewels, but the former with stinking carrion. Then he assembled his wazirs, exhibited to them the boxes, and ordered them to appraise their value, but they said: 'Outwardly we perceive that we cannot assign any price to the gold-boxes on account of their excellence, nor to the pitch-boxes on account of their meanness.' Then he ordered the pitch-boxes to be opened, and the house was illuminated by [the brilliancy of] the jewels. Then he said: 'This is the parable of the two men whom you despised on account of their outward mean garb and destitute appearance, whereas they are full of righteousness, wisdom, and all virtues which are superior in value to these jewels.' Then he ordered the two gold-boxes to be opened, whereon malodorous vapours issued from them, and the dismal, changed, distasteful, disgusting forms having been uncovered, they turned away from the sight, and complained of the stench. Then he said: 'This is the parable of those adorned outwardly, who glory in these perishable impossible bodies, whilst their internal parts are replete with folly and wickedness, as well as with all kinds of defects which are more deformed and more impure than this carcase.' They then said: 'Verily we have been awakened and admonished.' And this is thy parable, O son of the king, concerning the honourable recep-

tion thou hast given me." The king's son then stood up erect and said: "Now I am certain that I have found what I was in search of; give me therefore more of it."

Parable of the Sower.

The ascetic said: "The sower went forth with his good seed to sow it. When he filled his hand therewith and sowed it, some of it fell upon the margin of the road, so that shortly afterwards the birds snatched it away. Some of it fell on a rock, but meeting with humidity and soil, it sprouted; but when the roots touched the dry rock it died. Some of it fell upon thorny ground, and when it was near bearing fruit, the thorns overpowered and killed it; but the smallest portion of it, which had fallen into good purified soil, was saved, became pure and prospered. The sower is the bearer of the word, the good seed is rectitude of speech. That which fell on the ground and was snatched away by birds, is that which does not pass [deeper] beyond hearing, so that it turns away and is lost. That which fell on a rock and withered when its roots reached the rock, is that [word] which he, who received it, desired to abide with him when it struck his ear, but he did not knot his intention thereon [*i.e.* he failed to retain it with a firm will]. That which grew, and was almost bearing fruit, but was destroyed by thistles, is that which he who had received it retained, until the work, that is to say the fruit thereof, was suffocated by lusts and cares and [thus] destroyed; but that which remained safe, pure, and prospered, is that which was accepted by the ear and the eye, and retained by the understanding and memory, was cherished by firm resolution, reflection and judgment, so that no associate [other impression] obtained obtained a share therein."¹ The king's son said: "I hope that my case will be that of the seed which remains safe, is pure, and prospers. Then narrate to me the parable of the

¹ Compare this with Matthew xiii, 3-23, and the identity will be found to be very striking.

world and the beguilement of the denizens thereof, and what their purpose is."

Parable of the Elephant and the Man.

The ascetic said: "It is related that a man went out into the desert, and that whilst he was progressing, an elephant in rut attacked him. He ran, but, being followed by the elephant, and perceiving a well, he let himself down into it, hanging on to two branches which had grown on its margin, and placing his two feet upon something at the side of this well. When he clearly saw the two branches, he [also] perceived near them two rats, black and white, gnawing them incessantly. Then he glanced at what he had placed his feet upon, and lo! he beheld four serpents. Then looking into the depth of the well, he beheld a dragon with dilated mouth, desirous of swallowing him. Then he [again] raised his head towards the two branches, and lo! there was some bee-honey upon them, whereon he consumed some, and the enjoyment of the sweetness of the honey diverted his attention from [looking further at] the two branches on which he was suspended, but [afterwards] he took notice of the two rats who were hastening to cut [through] them, as well as of the four serpents, upon which his feet were resting, not knowing at what moment one of them might attack him, and the dragon with distended mouth, not knowing how he would fare in case he should fall into his jaws, and of the bees and the wasps which stung him whilst he was eating that honey. The well is the world, full of calamities, the two branches are [human] life, the two rats are night and day, and their haste in cutting through the two branches is the rapidity of [the succession] of days and nights in cutting away life. The serpents are the four temperaments, and when one of them is exorbitant, it kills; and the dragon is impending death, and the bees and wasps are misfortunes and calamities; and the honey is the beguilement of human beings in the world—by their slender enjoyment therein of the pleasure of life commingled with troubles and

difficulties—resembles the honey mixed with the stinging of wasps and of bees.” The son of the king said: “The parable is wonderful, and the similitude true; give me, therefore, another parable of the world, with its adherent beguiled therein by what does not profit him, [but] despising that by which profit redounds to him.¹”

The Man who had Three Friends.

The ascetic said: “It is on record that there was a man who had three friends. As to the first, he preferred him [to the other two] and honoured him with his soul by fighting for him. The second was inferior to the first, but he loved him and did not neglect him; and the third, being despised and degraded by him, he occupied himself very little with him. A calamity having befallen the man, he stood in need of his friends therein, and messengers of the king had arrived to take him away. He then went to his first companion, and said to him: ‘Thou art indeed aware how I prefer thee [to my other two friends], and I have spent my life for thee. This is the day of my necessity; what then may I expect from thee?’ He replied: ‘I have friends who occupy [and avert] me from thee, and they are now preferable to thee; moreover I have clothed thee with two garments [utilization of wealth for this and for the next world?], of which thou makest no use.’ Then he paid a visit to his second friend, and said: ‘I relieve thy want, and strive to gain thy approbation, but [now] I am in need of thee; then what may I hope from thee?’ He replied: ‘My own affairs engage [and impede] me from [aiding] thee to-day; and verily our connection is severed, since thy way differs from mine, I shall [however] side with [or accompany] thee a few steps, and then [I shall] depart to what is more profitable to me than thyself.’ Then he turned towards his

¹ This parable occurs also in *Katila va Dimna*, of which see the text of M. de Sacy, ed. 1816, ch. iv p. 75. I have also embodied it in my *Indian Fables in Mediaeval Literature*, which are however still in MS. only, and will probably remain so; my MS. contains nearly one hundred such fables.

third friend, and said to him: 'I am ashamed [to ask] of thee, but necessity has driven me to thee; then what may I expect from thee?' He replied: 'Thou hast a deposit with me, and I am under obligations to thee, and thy neglect of me is of little account, for I am thy friend who will neither abandon nor surrender thee; be therefore not dismayed on account of the smallness of what thou hast paid me beforehand, because I have guarded it, augmented it for thee, and then left it at thy disposal. Of the small amount of property [or rather money] thou hast laid up with me, the double of what thou hast deposited with me [now] belongs to thee; and I hope that thereby the king will be propitiated towards thee.' The man then said: 'I do not know which of the two things I am to be sorry for, my nearness to a bad companion or my remoteness from a true companion.' The first companion is wealth, the second the family, and the third good works." The king's son said: "This is the truth, then give me more of it."

The Foreign King.

The ascetic said: "The people of a [certain] town were in the habit of appointing a man who was a stranger to them and ignorant of their affairs to be their king, and expelling him after one year in a state of nudity, so that what elapsed of his royal affairs [or honours] became [the occasion of] calamity to him. One of them [who had thus been made king], when he perceived that he was [destined to remain] a stranger among the people of the town, sought no intercourse [or familiarity] with them, but endeavoured to find one of his own countrymen, or [some other person] who might inform him about their affairs and customs. He ceased not to search everywhere till he found one who revealed to him their secret, and hinted to him to accumulate at once as much as he could, so as to find it after his expulsion.¹ He did so, and the termination [of his reign] was for his own

¹ Is this something like the evangelical advice to make friends with the mammon of unrighteousness?

good. Thou also, O son of the king, art situated like that foreigner who wished to have no intercourse with those who were strangers to him, and I am the man who had been sought, and from whom thou wilt obtain direction and assistance." The king's son said: "I am a recluse in the world; then inform me on the state of eternity." The ascetic said: "Verily seclusion in [or rather from] the world is the key to [the] desire for eternity; and who desires eternity seeks it, and who seeks it finds the gate thereof, and who arrives at the gate thereof enters the kingdom thereof, and who enters the kingdom thereof enjoys the benefits thereof.¹ And how shouldst thou not be a recluse in the world when thou beholdest upon this body its influence which cannot be avoided, because heat melts it, cold freezes it, water drowns it, fire burns it, reptiles injure it, beasts of prey tear it to pieces, iron cuts it, and hard substances knocking against it break it, whilst disease and pain are by nature inherent therein; neither is there any expectation of its continuous health or immunity, it being moreover subject to [endure] heat, cold, disease, fear, hunger, thirst, and death." The king's son asked: "Were those thy friends whom my father had exiled and burnt?" And receiving an affirmative reply, he continued: "I was informed that the people gathered around against them with [or on account of their] enmity and evil speaking [or bad repute]." The ascetic said: "As to enmity it is [all] very well; but as to evil speaking [or bad repute] can it [or the accusation of it] be applied to one who is veracious and lies not, who knows and is not ignorant, who is satisfied with the smallest competency of everything, who abandons his property and family, who injures neither himself nor others; of whom no persons entertain fears that he will injure them or their families or their possessions." "Then how did the people agree to be their enemies whilst they disagree [in many things] among themselves?" He

¹ It may be seen that this declaration is entirely in the Buddhist sense, who do not require Allah—and only long to attain the *Nirvāṇa* which may perhaps be meant by the "kingdom of eternity" mentioned above—but He will also be alluded to afterwards; as also prophets, but none of them are specified by names or the religions they preached.

replied: "In the same manner as dogs gather around carrion [and agree in] biting it, but bite [also] each other, and bark at it, although they are of various statures and colours. Whilst they are fighting with each other for carrion, and a man happens to pass near them, they abandon each other and all rush upon the man, aiding each other against him, although he does not want their carrion, but they dislike him because he is a stranger to them, and they associate with each other. The carrion is the wealth of the world, and the various dogs which are fighting with each other for it are various kinds of men, who entertain no other care but [for the enjoyments of] the world. The man around whom the dogs assembled, who has no need of the carrion, is the ascetic who does not struggle with any one in [the affairs of] the world, and the people do not forbid this [indifference] because he is a stranger to them. And what more powerful argument is there [against the unreasonableness of this persecution] than that people at variance aid each other to assail him against whom no argument [of unworthiness] is adduced by knowing men?" The king's son said: "Execute thy purpose and treat me with thy medicines." The ascetic continued: "When a skilled physician sees a man's body worn out by lusts, by corrupt humours, and he desires to strengthen and to fatten it, he does not begin with food which produces flesh and strength, because he is aware that the mixing of strong food with corrupt humours is insalubrious to the body, but he treats him with what will destroy his corrupt humours, and purify his veins [i.e. blood], whereon he nourishes him with suitable food and drink; then he will become strong [enough] to bear the [food which is] heavy." The king's son asked: "Is that to which you are inviting me a thing which men attain by means of their intellects, so that they have chosen it in preference to something else?" The ascetic then said: "Verily this matter is too great to be an affair of the people of the earth, or that they should plan it by their own thought. If it were a thought of men of the world, it would be an invitation to its practices and ornaments, such as its food, drink, clothing;

accumulations, buildings, sports, and lusts; but it is a matter foreign thereto, and violating [the usages] thereof." He asked: "Does any one invite to this [asceticism] besides yourself?" He replied: "Yes! Religious people in all nations." The king's son queried further: "Then what has given you [ascetics] the preference [or superiority] in this matter [of the invitation] to others?" He continued: "The origin [or principle] of the invitation is the truth alone,¹ but the difference between us and between others is that this invitation ceased [or failed] to arrive and to appear upon earth with the prophets of Allah and His apostles during past ages [and has been promulgated] in various languages. Every invitation is a direction [or guidance] and [has] a correct purpose [or command], but the nations turn it away from its aim, and abandon the intention of its path, and continue to adhere to its name [only, but] pretend to understand it; and this constitutes the separation between us and them. We do not oppose any one, in any thing, unless we possess an argument against him [which we quote] from the remnant of the [sacred] books [which are still] in his hands, and from the sentiments which he utters. Our behaviour testifies that we are in accordance with the truth, and their behaviour testifies against them that they are in opposition [thereto]." He further asked: "Then how is it that when prophets and apostles arrive, then they are cut off, so that their vestiges become obliterated, and their sciences are ignored?" He replied: "Seest thou not the owner of the garden, how he establishes various plants therein, then hedges in every species of them, and enters it during some time only seldom; but when the vernal season is at hand he visits it, and proceeds to the side where his business is? The same is the case with the prophets and the apostles, because they come for the scope to which they have been ordered by Allah the great and glorious; and every season has its scope; the flower has one and the fruit another." He asked: "Do they proceed [only] to those of their scope, or do they

¹ Could this be the "supreme truth" of the Buddhists' *Paramārtha-satya*?

deliver a universal invitation, so that some accept it, and some who do not love them reject it? It seems they do not know those who respond to them, obey them, and are under their patronage [or government]." The ascetic said: "Listen to the parable which I shall narrate to thee."

Parable of the Bird, compared to the Prophets.

"It is said that on a certain coast of the sea there is a bird which lays many eggs; but a time arrives when it becomes difficult to him to dwell on the said coast, and he finds no means of subsistence [except] in another region, until the said time elapses. Accordingly he takes up his eggs and distributes them in the nests of [other] birds, egg by egg among the eggs of every species of birds. Then the birds cherish his eggs with their own, and his little ones come out with theirs, till the time of his return arrives, when he passes near those nests in the night and gives forth sounds which his little ones and others hear, but only his own gather around him when they hear his voice, the other birds not responding to him. The same is the case with the prophets and the apostles, because their invitation is responded to only by the people who belong to them." He asked: "If then thou art of opinion that the words of apostles are not like the words of [other] men; are they the words of Allah and his angels, or of others?" He replied: "Seest thou not that when people desire some beast or bird to understand that it is to advance, to retreat, to meet, or to back out, they find that beasts and birds cannot bear [*i.e.* understand] their actual words, and place upon them [*i.e.* communicate with them by means of] such threats and signs which they are able to bear [*i.e.* to understand], by means of which they attain their purpose with them. In the same manner, when men were too weak to bear [*i.e.* to understand] the words of Allah and of his angels, according to their [actual] form, perfection, and quality, sounds [*i.e.* expressions] were delivered [to them] which they return to [*i.e.* use] among themselves, by means of which they listen to words of

wisdom, through [the medium] of tongues of flesh, like the sounds of whistling or threatening which are addressed by men to beasts. In the same manner the spirit of wisdom is concealed in those sounds; and as words, when they contain the wisdom of Allah, are ennobled on account of the nobleness thereof, so bodies are ennobled by spirits, and as bodies void of spirits are useless, so from words when they are void of wisdom, which stands in the place of spirits, no profit can be derived." He asked: "How is it that this wisdom, of whose force and excellence thou hast given some account, is not profitable to all mankind?"

Parable of the Sun of Hearts and of Eyes.¹

The ascetic said: "Verily the light of wisdom is like two suns rising together; their light striking the faces of all mankind, the blind and the seeing. When the evident [conspicuous] sun rises [*i.e.* is visible] to conspicuous eyesights, it causes a division of men into three stations: one of them possesses good sight, to which the brilliancy is profitable, and which is strengthened by looking thereat; whilst another of them is blind, [remaining] a stranger to the brilliancy, who does not at all profit by the rising of the sun; and one of them has a diseased sight, who is accounted neither among the blind nor those of sound sight; he profits by the brilliancy according to the measure of his eyesight, and will be injured by the brilliancy according to the measure of the weakness of his eyes. Thus also the sun of wisdom, which is the sun of hearts, when it shines upon hearts, causes a division of them into three stations. The station of those endowed with sight [*i.e.* judgment] is, that they act according to wisdom, and honour the adherents thereof by choosing it, trusting in it, acting according to its requirements, spending their time in learning what they have not [yet] learnt of it, and in practising what they have

¹ Buddhists often use the term *internal law* to designate Buddhist instruction, and *external law* for general instruction, which may perhaps bear some analogy to the two suns here described.

not [yet] practised of it. The position of those who are blind [*i.e.* undiscerning] is, that in which the relation of their hearts to wisdom resembles that of a blind eye to the sun; whilst the state of those with diseased hearts is that where knowledge [or theory] is deficient and practice weak; good and evil, truth and vanity, being accumulated therein. And the difference between these two suns is, that most of those to whom the internal sun has risen, with its charms, are blind to it. In every stage of the stages of internal vision there is a difference as in the grains of pearls, and although all are called by one name there is nevertheless much difference between them." The king's son asked: "Is there [any] salvation for the defective [or guilty]?" He replied: "Verily there is deliverance [or manumission] in liberation [or emancipation] from folly and error, and there is salvation¹ in adherence to the protection of wisdom, and a portion thereof not falling [away or lost] is something, even if it be little." He asked: "Thinkest thou my father has heard anything of these words [or tenets]?" He replied: "I am of opinion that the information was not given to him." He [further] asked: "How have the philosophers failed to do so, and have not spoken to him on this important subject, and advised him?" He replied: "Because they knew the [unwillingness of the] recipient of their words; thus, perhaps, some philosopher may associate with an ignorant man all his life, and be loved by him, there being no difference between them except in [matters of] belief; he is nevertheless pained [*i.e.* reluctant] towards him, and does not think proper to open out [*i.e.* to reveal] to him the secrets of wisdom when he does not consider him worthy, as was the case with the prosperous king and his sage wazir."

The Prosperous King and his Sage Wazir.

"We are informed that there was a righteous king, and that he had a wazir who encouraged him to righteousness.

¹ These words may perhaps be intended to mean the *Moksha*, and the last of them the *Nirvāṇa*.

The wazir had indeed heard tenets of wisdom, understood them, responded to them, and segregated himself [from others] to the adherents thereof. The king was keeping nothing secret from him, and likewise the wazir hid nothing from him, except the subject of the [Buddhist?] religion and of wisdom. They lived together in this way for a long time, and whenever the wazir saw the king prostrating himself to his idols, making offerings to them, and behaving himself according to the behaviour [peculiar to the adherents] of their aberration, he became pensive, sad, and consulted his [Buddhist?] companions whether he ought to speak to him on this [subject]. They replied: 'Thou knowest thy companion [*i.e.* the king] best, and if thou thinkest him to be a [worthy] recipient of the tenets [of Buddhism?], then speak to him; but if not, take care not to direct him to the religion [of Buddha] and its professors, for the Sultân will be vexed thereby.' He continued: On a certain night when the people were resting—and in those days there was a great rain—the king said to the wazir: 'Art thou willing that we should walk about the town to see the state of the population, and the effect of the rain which we have had in these days?' He replied: 'Yes, if thou art so inclined.' Accordingly they roamed about in various directions of the town, and passed in a certain road near a heap of dung, belonging to the inhabitants of the town, which had grown to be a big hill, and the king perceived the brilliancy of a fire issuing from its side. He then said to the wazir: 'Come down with us; let us walk so that we may look at this fire closely, and know its knowledge [*i.e.* what it may reveal].' When they reached it [*i.e.* the dung-heap] they observed therein an excavation resembling a cave, which a poor mendicant had excavated and made a habitation for himself and his wife. Hearing sounds of song, both then looked from such a spot so that they could not be perceived from the cavern, and lo! they beheld a man of ugly aspect reclining on that [couch] which he had prepared for himself of garbage. He wore a garment of rags [taken] from the dunghill, and before him he had the fragment of

an earthen bowl [which had been] thrown [away by some person] on the said dunghill, but it contained a beverage. In his hand he held a bone, cast away from corpses, and he had tied thereon a skin belonging to the same, so as to resemble a drum. His wife was standing in front of him, her aspect and dress being the same as his own. She was serving him with drink, and whenever she addressed him, she addressed him as *Prince of men*, and when he spoke to her, he addressed her as *Princess of women*. There was among them gaiety, laughter, excitement, and more mutual dalliance than can be expressed,¹ so that the king was astonished at the condition they were in, and the delight they enjoyed. Then they departed, but his amazement had not ceased concerning what they had both seen, and he said to his wazir: 'I do not know that we [ever] enjoyed gaiety and delight such as we have seen with these two poor persons, and I think they will be continuing in this manner all night.' The wazir then took up the [subject of the] conversation after the king, and said: 'O king! I fear that we are as beguiled as they are!' He asked: 'How can that be?' The wazir continued: 'Because to those who know the everlasting kingdom a [terrestrial] kingdom is as this locality [which we have just seen] is to our eyes; and to those who hope for the mansions of eternal beatitude, thy mansions will appear as this cave [appears] to our eyes, and they will be astonished at the beauty and perfection [of all things] which thou enjoyest, as we are amazed at what these two destitute persons are imagining in their minds [that they are enjoying].' The king asked: 'And who are [men] of this description, and what do they describe concerning the everlasting kingdom?' The wazir replied: 'They are those who know Allah and seek eternity, [namely] the mansion of

¹ The so-called dung-heap was a place of cremation, the prince and princess a *Mahter* and *Mahtrani*, as all who are acquainted with India will readily admit; but of course, under the British Government, even the places of cremation have fallen under sanitary regulations and police supervision, so that the above description is not quite so faithful in our days as it was in ancient times. The Buddhists called a place of cremation simply a *heap*, so it is perhaps not surprising that our Arabic text calls it a *dung-heap*.

joy wherewith grief neither exists nor follows [or enters] it, but repose not fraught with fatigue, and light which is not followed by darkness, and knowledge not commingled with ignorance, and love not accompanied by hate; and content, and security, neither of which is coupled with wrath nor fear, and [whatever is] beautiful or pleasant, without any admixture of baseness or decay in either; health and life, followed neither by sickness nor by death, perfect immunity from all evils, and the plenitude of everything good.' The king asked: 'And do they record that there is any desire or any way to [attain] this abode?' He replied: 'Yes; they do not doubt that he who seeks it enters it.' He asked: 'Then why hast thou not informed me of this before to-day?' The wazir replied: 'Because the Sultân is blind to this [subject] and deaf. Blindness and deafness incite him to anger and impetuosity, intervening between him and between meditation and deliberation. His heart is occupied with various cares, near and distant; his audition is engaged with pleasant forgotten stories and gossip; his vision with extravagant colours and figures.' The king said: 'If this be true, we must not employ our nights and days, nor desire the use of our hearing and sight, in anything but this [subject], and if there be a doubt, it is incumbent on us to occupy ourselves with searching for a knowledge thereof, until we know whether it be true or false. And I am of opinion that thy concealing of this subject from me was not handsome, because I was trusting in thy affection, and considered thy [allegations of] excuse to be true.' The wazir said: 'Verily there is a close relationship between the beginning and the end of this subject [of asceticism], since both he who knows it, and he who is ignorant of it, [may] agree to abandon its precepts and to work for the world which is [or means] enmity to eternity; wherefore I have acted [thus, all] this time in not informing thee, from compassion towards, and from fear of, thee; like the swimmer towards his friend, who knew not how to swim, when he fell into the overwhelming water.'

The Swimmer and his Friend.

He [*i.e.* the king] asked : 'How was this?' He [*i.e.* the wazir] replied : 'We have been informed that there were two intimate friends, one of whom was a swimmer, but the other possessed no knowledge of the art of swimming, nor boldness to venture into water ; both however happened to fall into deep water. The swimmer then swam to save himself from drowning, and looking at his companion found him [alternately] sinking and rising in the water. When he perceived his ignorance of swimming, and the small chance of [saving] his life, the desire for the preservation [of his friend] impelled him to approach him, but he dared not go very near, for fear he might catch hold of him, and they would both be drowned. He therefore began to show him how he was working with his hands, in order to direct him ; he accordingly moved his hands in a similar manner ; whereon, hoping to rescue him, he endangered his own life by approaching him so as to enable him to take hold of his hand. Then he swam with him till both of them came out [of the water] and were saved. In the same manner, O king, I have endangered my life in this [matter] with thee, although I was aware of thy strength and of my weakness ; but when I saw that the opportunity was suitable, I spoke to thee about it. Then wilt thou permit me to remind thee of these words?' He replied : 'Yes! Always!' The wazir accordingly did so, and the end thereof was unto salvation."

The king's son continued : "I do not occupy my mind with anything besides this path, and I am firmly determined to flee in the night with thee." The ascetic queried : "How canst thou come with me, whereas I possess no beast to carry me, neither gold nor silver ; have not provided food, nor habitation, and wish to remain only a short time in the country. How couldst thou habituate thyself to the society of those who are like the dead?" The king's son asked : "How likenest thou them to the dead?" He replied : "Because they have deadened their animal lives, they rejoice at physical death." The king's son said : "The worshippers

of idols also pretend that they have, like the ascetics, prevailed over [the fear of] death, but they drink and eat as the ascetics eat and drink; then what is the argument in this matter?"

The Sparrow and the Fowler.¹

The ascetic said: "It is recorded that a certain man had charge of a garden. When he entered it on the customary day he had appointed for the purpose, he beheld a sparrow perched on a tree, the fruit of which it was plundering. He therefore set a snare for it, captured it, and when he was about to slay it, the bird said: 'There is nothing in me to satiate thee. Wouldst thou prefer to do something better than what thou intendest?' He asked: 'And what is it?' The sparrow replied: 'Let me go my way, and I shall teach thee three maxims, which, if thou rememberest them, will be better for thee than all thou possessest.' The man said: 'I agree; then inform me of them.' It said: '[Not] till thou swearest to set me [first] at liberty.' He accordingly did so. It then said: 'Do not fall into despair for what thou hast lost; seek not what thou canst not attain; and do not believe in [a thing] which will not be.' Then he let go the bird, which flew away, perched on a branch, and said to the man: 'If thou hadst known what thou hast lost in me, thou wouldst be aware that thou hast been deprived of a great thing.' He asked: 'What is it?' It replied: 'If thou hadst slain me, thou wouldst have found in my gizzard a pearl like a goose egg, and wouldst have enjoyed [much pleasure for] the price of it all thy life.' When the man heard this, he repented of having set it free, and in order to decoy it, spoke as follows: 'Let by-gones be by-gones, remain in my company and do not abandon thy place, because we are under obligations to each other.' The sparrow then said: 'O fool! I see thou hast not remembered the [three] maxims, and hast not retained me when I fell into thy hands; for

¹ This parable occurs also in the Persian work *Shanish va Qahqahak*, but is undoubtedly of ancient Indian origin. A notice of this work occurs in F. F. Arbuthnot's *Persian Portraits; a Sketch of Persian History, Literature, and Politics*, London, 1887, p. 119 seq.

now thou grievest on account of having lost me, and wantest my return, which thou canst not attain; and thou [also] believest in [a thing] which cannot be, because my gizzard is the smallest [part] of what is in me, whereas the egg [of a goose] is greater than me.' And this nation of yours, O son of the king, have manufactured their idols with their own hands, but believe that they were created by them. They have guarded them for fear of being stolen; they nevertheless say that they are guarded by them. They spend upon them their gains, and believe that they are provided for by them. Thus they have sought what cannot be attained, and have believed in what will not be. But as to thy assertion that we eat, drink, and clothe ourselves like them, [I state that] our eating is imposed upon us by necessity, like eating the flesh of corpses, in the same manner as the king who was besieged by his foe in a cave on the seashore, with his wives and children. They had been long in the place, unable to escape, and had no provisions. One of them having died, and they being ready to perish [of starvation], they did this [*i.e.* consumed the corpse]. Thinkest thou they ate the food of necessity or of appetite?" He replied: "Yea! the food of extreme necessity." He continued: "This is the difference between our eating and their eating, because we eat to avert necessity and unwillingly, whereas they eat with appetite and not by compulsion." The king's son said: "As to the idols, I do not cease to hate them, as I despair of their [being anything] good. Then inform me what the first thing is thou invitest me to, in [the articles of] the religion?" He then replied: "Two things, namely, a knowledge of Allah, and practising what pleases Him." He asked: "How am I to know Him?" He replied: "Thou must know Him by the unity, by the power, and by His justice, His greatness and knowledge of all things [*i.e.* omniscience], and by His exaltation above all things."¹ He

¹ If A'b'dullah Ibn Muqaffa' was really the translator of the Pahlavi text into Arabic, it is no wonder that, although he occasionally mentions Allah, he abstains from alluding to the prophet Muhammad, to Islam, or to tenets peculiar to that religion, because his orthodoxy and sincerity therein were always suspected. He was slain in a very cruel manner some years before A.H. 142, *i.e.* A.D. 759.

asked: "And what is the indication to all this?" The philosopher replied: "Thinkest thou not that when thou beholdest a made thing, thou knowest that it has a maker, although he may be absent from thee? In the same manner thou knowest Him in what thou seest of these made things, [such as] the sky, the earth, the sun, the moon, the stars, the revolving of the spheres, the flowing of the water, the motion of the wind, of fire, and the design of all created things, that they have a powerful, wise creator, and he is the Most High, the Great." He asked: "Then what will please Him in us?" He replied: "That every one should do to another what he loves that he should do to him, and that he should abstain from doing to him what he would like another to abstain from doing to him.¹ Herein is righteousness, and in righteousness towards Allah the righteous [man] is [also] pleased." He said: "Verily, now thou hast made me acquainted with the deficiency in the religion of idols, and with the position [of myself therein?], which is not correct." "Verily, the position in any other except the religion of Allah will not expand [*i.e.* be of advantage to] thee." He asked: "And what hinders my position [*i.e.* continuation] in any other, and constricts that upon me?" He rejoined: "Ignorance and knowledge." He asked: "Then what is the constriction of ignorance, and what is the expansion [*i.e.* advantage] of knowledge?" He said: "Knowledge is wealth, and wealth is expansion; ignorance is poverty, and poverty is constriction." He asked: "And what demonstrates this [opinion]?" He replied: "Perceivest thou not that thy breast is constricted by thy ignorance of anything asked for, and that thou hopest for relief [of the constriction] only in the attainment of the knowledge thereof?" He rejoined: "Verily I have seen persons hoping for relief [from things] wherein no relief is, and I am not sure whether I am not one of them." He continued: "Shall I show thee and inform thee of this idea, and terrify thee con-

¹ These will easily be recognized as entirely evangelical sentiments, but also other ideas, formerly believed to be wholly and exclusively Christian, have been discovered in ancient Buddhist writings, *e.g.* the Pali *Dhammapada*.

cerning the position of those who entertain it, [contrary to those] who do not entertain it?" He replied: "Only that could frighten me thereat." He said: "Thou hast certainly heard paradise and [hell] fire mentioned, and although they possess a meaning assigned to a real thing, they would have no names [unless they existed in nature?]." He [the king's son] rejoined: "If a speaker desires to produce a meaningless oration, he can do it; and the poet has said:

Many a vain story is reasonable.

If therefore thou compellest me to believe all that is reasonable, thou forcest me to believe liars [also, because their lies may be reasonable]." He replied: "Verily, I compel thee to believe isolated words not concocted by the compositions of liars." The king's son said: "Thou hast of a certainty forced me to the belief in Allah, and what came [or was revealed] from him about rewards and punishments, and I shall prepare myself for reclusion in [*i.e.* from] the world." The ascetic replied: "Not everybody is fit for reclusion therein, because it is a prison to the righteous and a paradise to the wicked. And why should one not be a recluse therein who knows that the benefits of eternity cannot be enjoyed except by liberation from the bonds of the world; because there is a contrast in these two abodes, the building of the one being the destruction of the other. The expansions and benefits of eternity are, that the way to it is easy, and the gates of it are open to every one who travels on the road to it; whereas the constrictions and blemishes [*i.e.* disadvantages] of the world are, that [happiness in] it is unattainable to the majority of those who seek it, and that those who love it are more wretched than those who reject it, so that the slave thereof may perhaps attain more [of the prosperity] thereof by opposing [the allurements of] it; because it resembles a thirst-producing desert, full of beasts of prey, greedy thieves, reprobate satans, rapacious ghouls, and scorching simooms; its waters are lethal poison, and its plants [are like] the tree of death. In its centre there is a garden with an enclosure which cannot be scaled, and a strong gate. It contains fruitful trees and shady waters. Thus [it may be

seen that] after the said thirst-exciting desert, there is on one side of it fertility, and cultivation, and friendliness [of locality], whilst on the other side of it there is a sea of poison, over which the simoom of fire blows; nor is there any other issue from the said desert, except by these two ways [*i.e.* the barren and the fertile]. This desert is the adumbration of the world, with the changes and troubles contained therein. The garden in the centre of it represents the few pleasures which are therein commingled with calamities and miseries. The cultivation and fertility at one of its sides is like the reversed position [*i.e.* happiness] of the righteous in the next world, and the sea of poison is the reversed position [*i.e.* misery] of the wicked in eternity."

The philosopher Belavhar [thus] continued to pay visits to the king's son during four months, preaching to him and teaching him. After that Belavhar informed the son of the king that a festival of his, and of his companions, being at hand, he desired to go out to them, in order to be present thereat with them. The king's son replied: "I shall go out with thee." But Belavhar rejoined: "Verily, thy going out with me will irritate the king against me and against my companions, and will induce him to injure the adherents of asceticism, and our joy at their being with us will be marred, and thine at being with us; so that thou wouldst be cut off from thy purpose, which thou wilt attain in the joy [of having become an ascetic] with the permission of Allah, by the benignity [of thy compliance with the warning I just gave thee], inasmuch as thy remaining with the king will keep him off from [injuring] the adherents of the [Buddhist?] religion, which is [accounted as] worship to thee [or as a merit for protecting ascetics]. Though we entertain no aversion to death, we dislike to aid [the king] against ourselves [*i.e.* to get us into his power]." He asked: "Where have you assembled?" He replied: "In a fertile plain." He asked: "Of what kind is your food?" He continued: "Of its plants and vegetables, which are not the property of any one. But as to gardens, or fields, or cattle, or sheep, we have none of these [things]." He continued: "Take in

thy provision-bag some property [or money?] for thy companions." He rejoined: "How could my companions be misguided by property; for I should be a wretched ambassador to them, if I were to come bringing to them [goods] of the world, which they have been verily struggling against till they have overcome it. Thus I would come to them as a foe, and renovate their lust. They have no need to meet an enemy, reminding them of the vanity of the world, because an enemy thereof is an enemy to poverty and destruction, whereas if they do not return thereto, what else are gold and jewels but various kinds of stones, for which we have no need in our [fertile] plain." He asked: "Then whence do you obtain clothes?" He replied: "These are one of our difficulties, and when we find a garment, we hope that it may be the last of our requirements from the world, and it compels us to have recourse to the adherents thereof." He said: "Then take a robe which thou mayest use [or give away]." He rejoined: "We do not renew garments until they are worn out, nor are we in haste to accumulate any for a day which we do not know whether we shall attain it or not." He asked: "Then whence hast thou this garment?" He replied: "This is a shell to which Satan is accustomed; I have assumed it to meet thee." Then he asked him to show him his dress, whereon he doffed the shell from a black skin stretched over an emaciated trunk [his body having such a black and lean appearance], and he [the king's son] felt pity when he beheld on his body the traces of devotion. He then said: "Accept from me a garment for thy body." He rejoined: "How could I accept for myself what I have declined [to accept] for my companions from affection for them; and, if it were proper, I would have procured them the benefit thereof." He continued: "Then leave with me these clothes of thine, and take others instead of them, because I should like to possess a pledge to keep from thee." He replied: "My wish to exchange something old for something new will extend my hopes in proportion of the time which each lasts. Then let it be so, but wilt thou give me a garment resembling it in decay?" Then he called for one

of his own garments, which he [the ascetic] took, and gave him a pledge [or promise] that he would return to him before the expiration of the year, in case he should not die or be overcome [or hindered by some accident]. He agreed, took leave of him, gave him his best wishes, and he [the ascetic] departed.

The king's son then secretly addicted himself to devotion, removed his clothes in the night, and donning the said [worn-out] garment [of the ascetic Belavhar] prayed therein till morning. The confidential servant of the king to [watch over] his son, being displeased with the access of Belavhar to the king's son, made use of a stratagem, and informed the king thereof, who then became very angry and sorrowful, but afterwards had recourse to gentleness [or delay] on account of what he hoped [to accomplish] by [the use of] cunning towards his son. He accordingly summoned to his presence an interpreter of dreams, [who was also] a sorcerer, and said: "We have been afflicted by the sting against which we had not ceased to be on our guard, and which we had feared concerning our son; then what is the advice?" The sorcerer replied: "The first advice is to call this man, namely Belavhar, and if we get hold of him, thou wilt strike him with our argument against the professors of asceticism, because they abstain from the food wherewith Allah has bountifully provided them to partake thereof, and to be thankful for it; and because they have cut themselves off from progeny, whereby alone the earth is made habitable, and the praise of Allah is augmented. If we thus attain what will turn the king's son [away from asceticism], and what will make him acquainted with his error, we shall have accomplished our purpose, or else we shall reprove him. Then I shall assume the form of the ascetic [by means of my sorcery?], in such a manner that the king's son will deny nothing of the covenant of his friend [and will not doubt that I am Belavhar]. Then I shall address him in his own language [according to his own ascetic tenets], by showing him the falseness thereof, and making him confess his aberration in his pretensions to abandon the cultivation

[or society] of the world, and verily this will be his medicine [or rather cure from asceticism], unless thou art of [a different] opinion." Accordingly the king issued a command . . .

[Here the MS. breaks off in the middle of the sentence.]

The opinion of Dr. Fritz Hommel as to the manner of the probable termination of this MS., if the end of it had not been lost, is as follows:

On the leaf (or leaves) that are wanting the information would have been given, how the king intended to get hold of Belavhar and could not find him, but had instead of him captured another ascetic, and caused him to be tortured; and how then the sorcerer's second advice was executed, and the false Belavhar (namely the sorcerer himself) was then introduced to the prince; how then, furthermore, instead of the false ascetic having been able to confound the prince, the latter, on the contrary, had converted the sorcerer to asceticism; how also a second sorcerer (in the Christian romance Theudas, surmised to be Devadatta in the Indian), who desires to seduce the prince by spectral appearances of beautiful women, is likewise by him led to a similar internal transformation; and how then, at last, the king gives to his son one-half of his kingdom, hoping thereby again to turn him to worldly thoughts; how the prince accepts it, but immediately after his father's death surrenders it to another man, in order entirely to withdraw himself into the desert, where he at last finds Belavhar again, and becomes after continuous asceticism and penance a real Buddha.

ART. III.—*Adventures of a Japanese Sailor in the Malay Archipelago, A.D. 1764 to 1771.* By W. G. ASTON, C.M.G., D.Lit., M.R.A.S.

THE following narrative is abridged from a Japanese book called "Nankai Kibun" (Notes of the Southern Ocean), which records the examination by the officials of Chikuzen in Kiushiu, of a native of that province, named Magotarō, who had been cast away on an island near Mindanao, and, after a captivity of seven years, was ultimately brought back to Japan in a Dutch ship.

I have, as far as possible, substituted the names of places given in our maps for those used by Magotarō.

MAGOTARŌ'S STATEMENT.

In the 13th year of Hōreki (A.D. 1763) I shipped as sailor on board the 'Isamaru,' a new junk, owned by a man called Bumpachi, and commanded by his son Jiuzayemon. I was then twenty-one years of age. After several voyages to Ōsaka and Yedo with cargoes of rice, we sailed from Shinagawa¹ in the sixth month of the following year for Tsugaru, to load with timber. We had a fair wind for the north, and were running with sheets slacked out² off Kashima, on the eastern coast, when one of the crew named Genzō fell from the deck-house into the sea. Sail was shortened, and we threw him gratings and poles, shouting to encourage him. We then lowered a boat, and searched everywhere near the spot where he had fallen overboard, but all was useless. Nothing could be seen of him, so we again made sail and proceeded

¹ The roadstead of Yedo.

² A Japanese junk has one large square sail, and the sheets, of which there are a number, fastened by rings to the deck, also serve the purpose of reefing-points.

³ Slacking out the sheets' is therefore equivalent to 'shaking out a reef.'

on our voyage. In due course we reached Tsugaru, and took in our cargo of timber. On the return voyage the 'Isemaru' put in at Saiura, where another sailor was engaged to take the place of the man who was drowned. Here the weather looked threatening, and, as Saiura was by no means a safe anchorage, we went on to Hakodate, where we stayed fourteen or fifteen days. At this port one of the crew absconded with a rio and a half, which he had been entrusted with for the keeper of the sailors' lodging-house. A man named Chôtarô was shipped in his place, bringing us again up to our full complement of twenty hands. From Hakodate we went on to Sendai, where we laid in a full stock of provisions, and supplied ourselves with whatever ship's gear was required. While we were detained here by foul winds, one of the crew named Yakichi had a dream, in which he saw a woman in white standing before the shrine (of the junk). She said to him, "I shall wait for you at Ofuchi," and suddenly disappeared. Yakichi thought this very strange, but he was ashamed to mention it to anybody. Now this woman in white must have been the guardian goddess of our ship, and if Yakichi had only had the sense to let us know at the time, we would have made her an offering of rice-beer and clean rice, and so dismissed her honourably. It turned out very badly for all of us that he did not do so. The weather now changed for the better, so we weighed anchor, set sail, and had gone some twenty-five miles or so, when the wind chopped round, and we had to use the sweeps to bring our vessel into Hôkiura. Here we found more than forty junks, all wind-bound. Our steersman, Shinshichi, hailed one of them, which was anchored close to us, and asked what they thought of the weather. They answered that they could make nothing of it, but that it had been arranged that if there was a prospect of fair weather two lights would be shown as a signal to put to sea. Three lights, on the contrary, would mean that we were all to put back to Ofuchi. The next day but one the weather moderated, and we agreed to start on the following morning; so before it was daylight, we made sail from Hôkiura. We had not gone far when the

wind suddenly chopped round to the west, the sky became overcast, and a very strange look came over the sea. We had a talk together, and the general opinion was that we ought to go back and wait for better weather. But an old sailor named Jimbei would not hear of this. He maintained that the weather would soon become moderate, and the wind shift back to the east as quickly as turning one's hand. A good many of the other junks put back, and we tried to persuade Jimbei that this was our best course, but he would not listen to us. Time passed, the sun set, and things looked very dismal. Only one other junk was now in sight. Later in the evening black clouds rose from the horizon to the north, west, and south, the rain came down like water from a trough, and the thunder and lightning were incessant. Suddenly, while we were looking in the direction of the harbour, the three signal flashes were seen among the great waves, and then all was dark again. "Put back, put back!" we cried, and all hands set to work to bring the ship's head round. But the wind blew harder and harder, the mast bent like a bow, and with all our efforts we could not get in the sail. It had to be cut loose, and as soon as it was let go, split into ribbons right up to the yard. There was now a lull in the wind, but the rain fell heavier and heavier, and the junk was struck by an enormous broken sea which carried away our bulwark. For a moment we thought we were going to the bottom, but, by all hands baling out the water and throwing cargo overboard, we managed to keep afloat, though every one of us was so benumbed by the cold that we had little strength left. Having prayed to heaven and the gods, we all cut off our hair, fastened it to the captain's dirk, and flung it into the sea. We could do no more.

Soon after, the weather cleared and the rain and thunder ceased, but the wind blew harder than ever. We lightened the ship by throwing cargo overboard and let her drift with the wind and current, in an easterly direction, as far as I could judge by the rising and setting of the sun. The sea and sky were of the same dull colour, and no island or other

land was to be seen. The rudder had broken, and though we did our best to repair it, it would never keep right for any length of time, so we were in constant danger of broaching to and getting capsized. At last we got out a hawser with an anchor over the bow, and kept the ship's head to the wind in this way.

When we had drifted, by our reckoning, for twenty-five days and nights, after losing sight of the Japanese coast, the wind changed to the north-east, and moderated a little. We had a consultation, and concluded that we had then gone about five thousand miles without having once seen land or a single sail. Nor had we any idea in what part of the world we were. Except the rain, which we made shift to catch in vessels, we had hardly any water, and our provisions were running low. Things did not look very bright for us, but as fate had not yet ended our days, we saw no good in drowning ourselves, and agreed to lengthen our lives as much as possible. We accordingly limited ourselves to two *shō* of rice made into gruel, with one *shō*¹ of water as the daily allowance for twenty of us. This was eked out by the flesh of the sharks and dolphins which abound in these seas, and of which we managed to catch a few. Some of the sharks which we hooked were perhaps four fathoms long.

In four or five days it again began to blow hard from the west, and we drifted eastwards by the compass for fourteen days more, when we sighted land about twenty-five miles away to the southwards—the first land we had seen since we were blown out to sea. We were all greatly cheered by the sight, but as we had neither sails nor rudder, we had no control over the ship in the strong current and fresh westerly breeze, and could do no more than pray with our whole hearts to the gods to guide our course for us. We had seemingly got within six or seven miles of the land, when the wind suddenly shifted to the south, and the ship drifting northwards, it finally disappeared again from our view.

¹ A *shō* of rice weighs about 2½ lbs. Half a *shō* is considered a fair allowance for one man per day.

After fifteen or sixteen days more the wind changed again to the west, and we came in sight of a large island which lay about thirty-five miles from us in a south-easterly direction. We had then been drifting for one hundred and one days.

The next day was New Year's day, and in all our misery, we noticed with pleasure that it was on this day that we discovered land, and that the wind and sea had at last become calm. We felt as if restored to life again, and cooking some food, ate it with prayerful hearts.

We could see no houses on this island, but there was smoke rising from the hills, from which we concluded that it must be inhabited. A belt of land along the coast was seemingly covered with a thick growth of great trees.

Putting all our things into the boat, we left the junk anchored out at sea with two anchors, and approached the shore. But we then found that the trees were not growing on the beach but in the water, by thousands, at a depth of three fathoms or so, for many miles along the coast. We searched everywhere for some creek or harbour where we might moor our boat, but could find no convenient place, and though we rowed in among the trees, they were so overgrown with rattans that there was no room for one's foot. So we had to put out to sea again, and taking a good look at the island, saw some smoke rising to the northwards, which led us to think that there might be a harbour there. Unfortunately, just then a northerly breeze sprung up, and we were so feeble from starvation and fatigue that we could make no way against it, and had to let our boat drift along the shore. After several days of this, we saw another large island, and making for it found that it was a waste of white sand dazzling to the eyes. We landed, but could find no trace of man or beast, nor anything like a village. In some places there were trees resembling mulberry trees, with a fruit like a horse-chestnut. We were all starving with hunger, so we picked up some which had fallen to the ground and ate them. They had a sweetish acid flavour which was not unpleasant, but half an hour after, our bodies swelled up, and we had pains in the chest, which we thought

were caused by the poison of the fruit. However, none of us died of it.

The next day we rowed on, and found a great number of sea-slugs two feet long. One of these was a meal for five men. The following day we continued to row along the coast, and saw growing on the sand a creeping plant with leaves like those of the sweet potato. We pulled up some of this and ate the roots, but they were also poisonous, and we were all ill after eating them. Several days later we at last, to our great delight, discovered something which had the appearance of a human habitation. We approached in our boat, and saw two men whom we called to. But they ran away as soon as they saw us. We then put our dress in order, and scrambled on to the beach; but we were so weak from hunger that we were unable to walk, and could only stand huddled together gazing stupidly. A little while after, about a hundred of the natives came forward armed with muskets, blowpipes, spears and shields, and drew up in a line near us. Their faces were black, their hair hung loose, and most wore short jackets, though some were entirely naked. They were all barefooted. Bye and bye fourteen or fifteen of them came up and said something, of which we could not understand a single word. One of us wrote on the sand the Chinese characters for Japan, which they again did not seem to know. Then there was a sudden rush to our boat, and everything which we had left in it was plundered and carried away. We consulted among ourselves what had best be done to prevent this, but it was too plain that we were wholly at their mercy, so we reluctantly begged them by signs to give us food, rubbing our breasts and bellies, and pointing to our mouths. This they understood, and no long time after brought us fourteen or fifteen pounds of boiled sweet potatoes in a basket, which we fell to and ate without ceremony, and then lay down to sleep on the sand just as we were.

About midnight we were awaked by a great noise of trampling of feet. Raising up our heads, we saw by the light of the moon a great crowd of the same people, who

began to prod us with staves. One of us caught hold of the end of one of these staves, and found that it was a spear with the sheath on. He cried out, "Get up! get up! this is not a time to sleep." We were all greatly alarmed; but, on reflection saw, from their prodding us with sheathed spears, that they did not mean to kill us, but only to see whether we were alive or not. They then unloosed our girdles and stripped us of our clothes, to replace which they gave us some tattered garments of their own. They also took away our handkerchiefs and nose-paper bags.

The next morning we went to their huts, and asked for food, when they again gave us some sweet potatoes. The huts had no walls, but were thatched with the leaf of a plant called *atabu*. Within there was a cooking-place, and a number of earthen pans were lying about. These huts were only for temporary use during the season for catching the sea-slug, which they gather in large quantities and make into *trepang* by drying in the sun. I learnt afterwards that the name of the island is Magintarō (Mindanao).

The next two nights we slept in the open air. It was not cold, the climate being like that of our fifth or sixth month (say July). We then held a consultation together, and came to the conclusion that this country must have a governor of some sort, who would probably do something for us if we applied to him. So holding up the thumb,¹ we asked the blacks if they had a chief. They seemed to understand us, and, pointing to the west, signed that we should have to go that way. Then they blew on the palms of their hands, to indicate the sail of a boat, and nodded their heads. Bye and bye a canoe was brought. We were invited to get into it, and signs were made that we should row. We excused ourselves, making signs that we were too weak to do any work: but the blacks got very angry, and knocked five or six of us over with blows and kicks. We then clasped our hands together, and tried to make them understand that we had no strength in our limbs. They at last saw what we meant,

¹ The thumb in the gesture language of the Far East means 'chief' or 'father.'

and were induced to treat us more kindly. Claspings the hands together is, I suppose, an Indian way of showing respect, which they would naturally understand.

The canoe was sewn together with a creeping plant of some sort, and had no nails in it. It was pointed at both ends, and went down to a sharp edge at the bottom. Its balance was very bad, and to keep it steady there were outriggers at both sides. The sail was supported by two or three masts, which served to trim it to the wind on either side.

No sooner had we got clear of the land than a fair wind sprung up, before which we ran for five days and five nights. We then entered a river some half a mile wide at its mouth, and going up this for fifteen or eighteen miles came to a place called Karakan, where the governor lived. Here there were three hundred houses or more, scattered along the river bank. They were about thirty feet high, and the doors, which were some ten feet above the ground, were reached by ladders. Some of them were built on rafts, which were moored to piles in the river. They were all thatched, and the walls were made of split rattans woven together. No plaster walls were to be seen.

One of the blacks landed here, and soon after a number of them came and took us ashore with them to the governor's house. It stood in an enclosure constructed of planks, with a great door in the middle by way of entrance-gate. The mouths of several cannon stuck out from ports on each side. The buildings within were large, but they had all thatched roofs. We were shown up a ladder, and, going in, found three men seated on chairs, whom we took to be the governors. They wore chintz gowns and turbans of the same material, and all carried swords stuck in their girdles. The one who sat on the right, an old man, pointed to a chopstick which one of us had stuck in his hair, and said 'Hippon,' meaning Japan, by which it appeared that it was only now that we were known to be Japanese. This old man had perhaps come with the Dutch to Nagasaki. What else they said we could not understand, but the old man gave

some long orders to the men who had brought us, and we were taken to a vacant house some way off, where we remained that night under the charge of three blacks. The governors sent us a quantity of millet for our supper.

Early the next morning the natives brought a lot of timber and built a shed, some eighteen feet by forty-two feet. The walls were of rattan, the roof was of thatch, and the flooring of planed cocoanut tree wood. We removed into this, and were supplied with one earthen pan, and with bananas, sweet potatoes, and something like fern-flour,¹ for food.

After we had lived here for about a month, we were distributed among the blacks, one to each, by order, I suppose, of the governors. But we were not far separated, and were able to meet regularly. I fell to the share of a man called Lolō. He lived in a house like those I have already described. The floor was covered with rattan mats, on which the whole family slept together. No metal pots or pans were to be seen: everything was of earthenware. For breakfast and supper we had bananas or sweet potatoes, which were served in a large basin, round which we all gathered, and, kneeling on one knee, ate with our hands.

My master, Lolō, took me to the fields with him every day to dig potatoes, and made me carry them home on my back in a mat. At first he drove me before him with a whip, as if I had been a horse or an ox. Sometimes he made me paddle his canoe, when he went fishing for *toai*. The *toai* is a kind of shell-fish. The biggest measure a foot and a half in breadth, and weigh perhaps fifty pounds. They are caught by inserting between the two shells a bamboo pole armed with a hook. The *toai* then closes on it, and is hauled up into the canoe by two men. It is excellent eating.

Some time after we had become slaves to the blacks Yatsujirō fell ill, no doubt on account of the marshy nature of the soil, and died. The blacks tied a stone to the body, and, taking it out to sea in a canoe, flung it into the water. Then two more of my companions died. I could not bear to think of

¹ Sago.

their being sunk into the sea, and begged that they might be buried on shore; but the blacks refused, for the reason, so far as I could make out, that the soil would be polluted. So my comrades and I carried the bodies to a spot far away from any houses, and buried them there, the blacks not offering any objection.

Shortly after this the natives took away Jimbei and Jinjirō, saying that they were going to send them back to Japan. We all asked to be sent back too, but they would not listen to us. We never learnt what became of these two men. Next the captain died, and was buried by us in the ground like the others. Then Tōzō was taken away. I missed him sadly. Soon after four more of us died, so that only seven were left.

About the seventh month of that year, a merchant junk arrived from Soolook (Sooloo or Solo) with a cargo of bananas and pottery. The captain, a man called Kolō, bought my six companions and myself, and, when the time came for him to return to Sooloo, put us on board his vessel. She had three sails, carried two anchors at her bows, and was of a different build from the Karakan junks.

After coasting along in a westerly direction for fourteen or fifteen days, we came to a place where all hands were sent ashore to fetch water. For this purpose we had great bamboo tubes about five feet long. There was nothing else on board for keeping water in—no casks or earthen jars. When on shore here, I fell in with my comrade Tōzō, whom I had lost three months before. He was busy pounding chestnuts. I ran up to him, and asked him how he was, and we were beginning to have a chat, when the blacks came shouting at me, and I had to leave, having only had time to bid him good-bye.

We then steered out to sea, and sailed for three days and three nights, till we came to a large island and entered a river, which was about two and a half miles wide at its mouth. Seven miles up this river we arrived at the port of Sooloo, where the Sultan resides. The town has four or five hundred houses, built along the river bank in a scattered

way. The manners and customs of this place are the same as those of Karakan.

We were not taken before the Sultan, but were at once disposed of to various buyers, all except Saigorō and myself, who were retained by Kolō as slaves in his own household. The front part of his house was a shop, where he sold bananas, pottery, and the like; and he also owned junks, which he sent on trading cruises with cargoes of bananas, millet, rattans, and trepang. I sometimes went as a sailor on these voyages. When there was nothing else to do, Kolō took me with him on fishing excursions to a neighbouring island where there were *toai* and huge crabs in great numbers. These crabs have shells a foot across, and the flavour of the meat is excellent. In fishing, they use hand lines only, and no nets.

After I had been about a year in Sooloo, Kolō resolved on a voyage to Banjar Masin. He got ready a junk with a crew of twenty men, and took in a large cargo of bananas, sugar cane, etc., also thirty slaves, both men and women, including Saigorō and myself. All these were shipwrecked people from various countries, who had been made slaves by the blacks. There was a priest from Manilla among them, and some people who called themselves Hokesch. I was now parted from five of my companions, whom I never saw again.

When we had sailed for about thirty days in a westerly direction, Saigorō died. There happened to be just then an opportunity of going ashore, and I asked the people of the junk to help me to land the body for burial. But they refused, telling me by signs that I might throw it into the sea. So I took the body ashore by myself with no small difficulty, and buried it on the beach, digging a grave in the sand with an oar.

I had now lost the last of my nineteen companions, and was left alone and a slave. I was so overcome by grief that I lay down in the bottom of the junk. I suppose the blacks thought I was going to die too, for they seemed anxious about me, and gave me food and nursed me.

Soon afterwards a very strange thing happened. The weather, which had been fine, became suddenly overcast, a mass of clouds rolled down over the sea, the tide rushed in eddies, and the surface of the water took the shape of the letter W. I thought the ship was in the greatest danger, but the blacks were not much alarmed. They fired off a cannon twice, and with that the dark clouds suddenly dispersed, the sea went down, and the weather became fine as before.

After we had been about forty-two days at sea, we entered a large river, seven or eight miles wide at its mouth. We went up it for twenty or thirty miles, and then, turning into a branch stream, found ourselves at Banjar Masin, the largest town in the southern part of Borneo. There were a great many vessels lying here, some from China, and some from Holland, and other barbarous countries. For the first time since I had been cast away I saw houses with plastered walls, standing together in streets. These were the houses of the Chinese merchants, and were some four or five hundred in number. A short distance away there was a large native town, and on the other side of the river stood the Dutch Trading Factory. It was built up from the bank with hewn stone like a castle, and had port holes for several tens of cannon. I have no words to describe its stern and strong appearance.

You ask me how it is that the Sultan allows the Dutch to hold a fortified place on his territory. It is because they are so strong that the native chiefs are afraid of them. The Chinese were constantly outraged and insulted by the blacks of the lower class, and no redress could ever be obtained. But not only were the Dutch not molested, but the Sultan himself was afraid of them, and the natives did not venture near, so great was their power and prestige. Formerly both the Dutch and Chinese paid house-tax to the Sultan of Kaitan.

On arriving here, Kolō took all the slaves ashore in a boat, which he moored to the river bank. He then led us round to one place and another for sale, as far as I could make out.

I noticed that the streets were lined with handsome shops, and that the roadway for six or eight feet from the houses was paved with tiles or hewn stone, or in some places with planks of the wood of the cocoa-nut palm. The people in the streets, too, were better dressed and looked more civilized than the natives of Karakan or Sooloo.

I thought to myself that I should be lucky if I were sold to somebody in this place, and was wondering what was going to become of me, when I was taken to the house of a rich Chinese merchant called Taikonkwan, and sold and delivered to him. Kolō was paid in Dutch silver coins about an inch broad, and stamped with the figure of a man on horseback. They are equal to twelve Dutch copper coins, and are called "twelve stivers." Kolō received thirty of these coins in payment for me, and was given a meal of boiled rice, and sent away. The natives have no coinage of any kind, and their currency is a mixture of Dutch silver coins and Chinese copper cash.

This country is much troubled by robbers, who infest the public roads even in the daytime. At night, by order of the Sultan, any black who is found roaming in the streets after eleven o'clock is cut down. Even slaves, when they go abroad, carry a weapon of some sort with them for their defence. I was provided with a musket, a sword, and a lance, and was given a shirt and other needful things. I was called "Nippon."

Taikonkwan's family consisted of his wife, mother, and younger brother, with two Chinese clerks. There were also four blacks, two of whom were slaves. The other two were boatmen, and lived separately with their wives and families. There were three female slaves, all blacks from a different country.

I had my meals and slept away from the black slaves, and was treated by the Chinese with great kindness. It was my business to go about with my master or his clerks carrying merchandize for sale, and I had also to fetch water and firewood. When a junk was sent off, I sometimes went as a sailor.

On the day that I arrived in Taikonkwan's house, a

Dutchman came there with a following of some ten persons. He was invited to take the seat of honour, and my master and he had a long conversation which I did not understand. Taikonkwan afterwards explained to by signs that the Dutch had heard of his having bought me for thirty silver coins, and had offered him a hundred, in order that they might send me back to Japan. He had answered them that he was not a slave-dealer like the blacks, and that he would send me back himself.

Later, I had frequent occasion to go to the Dutch factory on business. The Dutch tried to persuade me to run away by night and swim across the river to them, when they would have me sent back to Japan in their ship which sailed from Batavia.

Taikonkwan dealt in silk goods and earthenware. When a customer came into the shop, he was offered a pipe, for lighting which a tinder box was always used. A little while after, tea and betel nut were served.

The interior of the house was all floored with tiles, upon which the family sat and slept. In one of the back rooms there was a Buddhist shrine, before which the old lady and the rest regularly performed their devotions. Here they also made offerings morning and evening, muttering prayers whenever they removed or placed before the god the vessels set apart for his service. The ladies seldom appeared in the front rooms.

Though Taikonkwan's house was thriftily managed, and nothing was done for show, he was a rich man, and the shops on each side and opposite, five or six in all, belonged to him, and were managed by himself or his agents.

There was a Chinese school close by. The hours of teaching were in the evening. There were several tens of pupils of from ten to fourteen years of age. Some of the younger ones came to school on the backs of their parents or elder brothers. The teacher first taught them to read the lesson, and then made them write it out. They had to learn a verso, a paragraph, or a chapter according to their age. Even a single wrong stroke in a character was counted a mistake,

and was punished by a blow with a cane on the palm of the hand. The canes were big or little in proportion to the age of the children. For breaking the rules of study, which was a more serious offence, they were punished by being made to stand before the family shrine of Buddha and having to go to bed supperless. The schoolmaster used to get me to make his canes for him. I made them so thick that the children complained, and said that Nippon's canes were all too big. I told them, joking, that if they would give me money, I would make them small. After this they would bring me one or two cash secretly to bribe me to make the canes small.

Thirty or forty miles from Banjar Masin there is a place called Kaitan, where the Sultan resides. Taikonkwan always took me with him when he went there to trade. Kaitan is a thriving city of over ten thousand houses, not at all like Karakan or Sooloo. The Sultan is called "Rato." His residence stands in an enclosure of planks of red sandal wood, pierced here and there with port holes for cannon, and surrounded by a moat. The gate has a tower over it with a chamber, and the lintels are carved with faces of savage beasts. Inside the gate I noticed a palanquin which had a canopy of beaten brass. I was sometimes admitted to the presence of the Sultan. He sat on a throne, splendidly dressed, and was attended by numerous officers on his right and on his left. Taikonkwan saluted him by bowing down with his hands clasped together. I was repeatedly told by the officers to follow his example, but I pretended not to understand, and, looking them straight in the face, said in Japanese, "Eat dirt; why should I kowtow to a nigger?" Of course they did not know what I meant, and so I did not get into trouble for it.

The Sultan has games at this place every year, in the eighth or ninth month, when there are mock fights by men on horseback with spears and muskets.

Whenever the Sultan goes out he is accompanied by a guard of soldiers, who fire off their muskets at the turnings of the road.

Ten days or more up the river from Banjar Masin, there is a place called Wyaja, which is not subject to Kaitan. The inhabitants are all hunters, and live by the sale of wild animals. Taikonkwan's father-in-law was engaged in this business, and lived among the Wyaja. I went there more than once on trading voyages, and observed many strange things in their manners and customs. The first time I went was with Taikonkwan's younger brother Kambenkwan. We loaded a boat with pottery, and after sailing up the river for ten days, entered a mountain gorge. The scenery was awful; the banks of the river on each side were thickly overgrown with an ancient forest, from which we could hear from time to time the cries of strange birds and beasts. At dusk we came to some houses, and then Kambenkwan took the helm himself, and, keeping the boat's head up stream in the middle of the channel, soon guided us to Irinkawa, the port of Wyaja, where we landed our goods, and went to lodge at the house of Taikonkwan's father-in-law.

The next day I went round from house to house with Kambenkwan, carrying a load of earthenware for sale. In a certain house that we came to I saw on a shelf three human heads set in a row. My hair stood on end with horror, and I secretly asked Kambenkwan what these heads might be. He told me they were for sale, an answer which only increased my amazement. When we got back to our lodgings, I asked further about the heads, saying that this seemed to me to be a very dangerous place to live in. Kambenkwan told me I might make my mind easy; he had frequently been here before, and had plenty of friends in the place. Nobody, he said, ever harmed the Chinamen who came here to trade. But it was not safe for people who approached by night to skirt the river bank too closely. There were here and there platforms where there were boats slung from pulleys. The natives were in the habit of getting into these boats, and lowering them suddenly to spring into any strange vessel which chanced to be passing, and carry off as plunder the heads of the people on board. At night it was not safe even for Chinamen.

It is the custom of this tribe, on the death of a parent or relative, to cut off a man's head and make an offering of it at the funeral, when it is set up at the grave on the top of a piece of wood carved into the shape of a serpent. If this is not done, they think that the dead person will send a curse on them.

Rich people provide themselves beforehand, by taking captive or buying natives of other countries. To prevent them from running away, they put an iron plate crosswise between their legs, which they fasten together by means of an iron chain attached to it. By another chain this plate is suspended from the neck, and secured by a padlock. The man is then set at liberty; but, as he cannot put one foot before the other, he is not able to get away more than a hundred yards or so. Poor people cannot afford to keep a supply of captives for this purpose, so they buy the heads which are for sale in the shops and offer them at the graves.

I was seven years in Taikonkwan's service. At first I did not understand the language, and we had to communicate by signs, which was very inconvenient. But by degrees I learnt enough Chinese and Negro language (Malay) to get on without much difficulty. Still I could never overcome the feeling that it would be a great pity if I, a native of Japan, were to end my days in a country inhabited by blacks, and I racked my brains to discover some means of getting back to my native land. It occurred to me at last that I might do something by working on the great regard which my master's household, like all Chinamen, had for the practice of filial piety. I was really an orphan, but I made up a story which I told from time to time to the people about me. I said that I knew well how lucky I was to have escaped death by shipwreck, and to have come to such a rich and prosperous country. I was still more fortunate, I said, in having found so kind a master, with whom I had lived so many years in far greater comfort than if I had remained in Japan. But though I was perfectly contented with my own condition, I was disturbed by the thought that my poor father and mother, now advanced in years, were doubtless

still expecting my return, and wept tears of sorrow for my absence every morning and every evening. If I were allowed to go and see my parents and relieve their anxiety, I would return to Borneo by one of the Dutch ships which visited Nagasaki every year, and resume my service. To give point to my story, I held up my thumb (=parent) and placed my little finger (=child) alongside of it, lamenting so that all the family were affected, and greatly admired my filial intentions.

One day Taikonkwan sent for me and said, laughing, "Do you think Japan is such a short distance away, that you talk of going there for a visit and coming back here again? Japan is more than ten thousand *li* from here, and you could not be expected to return. You know that I bought you for your whole life, but if your longing to see your parents is so great, I will not oppose it. You shall go back to Japan by the first opportunity that offers; so make your mind easy." At this I leaped for joy, and from that day could think of nothing else.

Soon after two Chinese junks arrived from Foochow, and the captain of one of them came to stay in Taikonkwan's house. My master explained to him his desire to send me back to Japan, and found that he had no objection to give a passage. But after consulting with the other captain, he said that if I could write the Chinese character¹ he would take me just as I was, but that otherwise I must have my head shaved and be disguised as a Chinese. This I would not agree to, and so the opportunity was lost.

The next chance which offered was that of a Dutch ship which was sailing for Jagatara (Batavia). I asked my master to let me go by her, but he refused, saying that the Dutch were such ruffianly cruel people that he could not think of sending me by one of their ships. I felt that there was really nothing to be afraid of, and persisted, so he at last granted my request, and took me with him to the Dutch factory. There he presented me to the President, and cour-

¹ So as to save him trouble in communicating with the Chinese authorities in Foochow.

teously begged him to take charge of me. This was what the Dutch had all along desired, so they gave a ready consent, and entertained us with cakes and brandy.

When we got home Taikonkwan gave me a packet of silver pieces, a tortoise shell, and his favourite red parrot. (This bird lived until our voyage to Japan, but the Dutch captain, finding it troublesome, ordered the stock of sugarcane which I had brought for its food to be thrown overboard, and it consequently died. As it was a keepsake from my benefactor, I pulled out its feathers and kept them as far as Nagasaki, where I had to give them away to various persons who pestered me for them.) He also told me to take my private effects, and the musket, sword, and lance which he had supplied me with. I returned the arms with thanks, as they would be of no use to me after I had once put myself in the hands of the Dutch; but Taikonkwan insisted that no man should ever be without a sword, so I kept it, and stuck it in my girdle. My fellow slaves also made me presents of two or three silver coins each, done up in red paper, and one of the female slaves named Ukin undid her scarf and gave it to me. It is of cotton stuff, with a black flowered pattern on a grey ground, and I now wear it as a girdle. When I was leaving, not only my master, but the ladies, who were hardly ever seen out of doors, and even the neighbours, all came down to the river side with me, weeping and lamenting my departure. I, too, was full of grief at leaving a place which had been my home for seven years.

I stayed that night at the Dutch factory, and the next morning was taken on board a large ship. She was smaller, however, than the ships which trade to Japan. The anchor was weighed, sail was set, great guns were fired, and we dropped down the river to its mouth, where we shortened sail, and anchored again. From this place boats were sent back to the wharf, and for three days continued to bring merchandize on board. I could not make out what it all meant, and began to fear that for all their promises to take me back to Japan, the Dutch might delay so much on the way, for the purposes of their trade, that it would be a long

time before I arrived there. This fear so wrought on me that I asked to be put ashore in one of the boats which were constantly coming and going; but the captain got very angry, and shouted roughly at me, "You go to Nagasaki."

When the Dutch ship had taken in all her cargo, she put to sea, and sailed steadily in a south-westerly direction for seven or eight days. We then arrived at a place which I was told was called Sourabaya. I only saw the town from a distance, but it seemed a fine place, and there were many vessels in the harbour. A boat was sent ashore here, and, on its return to the ship, we again made sail, and after a voyage of twenty-nine days from the time we left Banjar Masin, reached Batavia.

This is a truly magnificent seaport. What with barbarian (*i.e.* European) ships and Chinese junks, there were not less than one or two thousand vessels lying here. The eye could not embrace them all. On our arrival the captain ordered his gig to be got out, and went ashore in it, without telling anybody what he was going for. I was not allowed to land, and went to sleep in great anxiety, not knowing what was to become of me. But after nightfall a boat came alongside, and an order was given that the Japanese's things should be put into it. This revived my spirits, and I lost no time in getting aboard.

After rowing for about two miles we came to the mouth of a river, the current of which ran so strongly that it was impossible to make head against it. Here two men on horseback made their appearance on the bank; a rope was thrown to them from our boat, which they made fast to a crossbar between the two horses, and we were then towed up the river at a rapid rate for about two miles and a half. We then came to a place where there were guard houses on both banks, lighted with torches, and having several cannon planted in front of them. A little higher up, the channel was closed by a barrier made of great wooden piles standing up out of the water, and secured with iron chains. In the middle there was a gate which was closed every night, and all passage stopped. We were too late to get through, so we

landed, and passing through the guard house soon arrived at the town.

I slept that night at the captain's house. The next morning I was called before daybreak, and made to put on my best clothes. Bye and bye a carriage was brought round, in which the captain took his seat and placed me beside him. It was of a very light construction, with four wheels, and was drawn by two white horses. There was a board in front on which the driver sat. On another board behind a man stood holding a large umbrella, and on each side of him was a guard armed with a lance and musket. We were not followed by any attendants on foot. The driver whipped the horses, and we started off as if flying. On each side of the road there was a row of plastered houses two or three stories high, none standing out before another, or falling back from the line. They were more splendid than I can describe. The roadway was six or seven paces wide, and under the eaves on each side a space of about ten feet was paved with flat stones or tiles. The middle of the road was of earth beaten quite flat, and was used by horses and carriages, the side walks being kept for foot passengers. The streets were crowded with Dutchmen, Chinese, and men of various barbarous tribes, of all ranks, passing backwards and forwards.

I observed that the merchandize was distributed according to quarters. In one quarter nothing was sold but piece-goods, in another ironmongery, in another pottery, in another vegetables, and so on. This struck me as a very convenient arrangement for business.

We passed several bridges, under which the water whirled along with great vehemence. I was told that these bridges were drawn up by machinery at night and all passage stopped.

The nearer we approached the Government House, the more magnificent and beautiful were the buildings. Most were three or four stories high; some were square, others round, and others six or eight sided. The windows of them all were fitted with glass, which glistened in the sun.

The Governor's castle was surrounded by a moat twenty paces wide, the water in which, judging from its rapid flow, must be drawn from a river. Outside it cannon were planted. I tried to span the mouth of one of them between my thumb and middle finger, but could not reach across. At the bridge over the moat the captain got down from the carriage, and taking me with him walked on, followed by the man with the umbrella and the two guards. We passed through several gates, inside the last of which there were posted to right and left twelve men on horseback, dressed in jackets of fine red cloth, and armed with muskets. I also noticed here two great earthenware bulls of wonderful workmanship. They looked as if they were alive. A little further on there was a shed about thirty feet square, where cannon balls were piled up like mountains. Though I am only a common man, I was greatly impressed by the warlike appearance of all these heaps of shot, some of iron, others of lead, some great, and others small.

When we arrived at the Government House, we were shown into a large room where there was a man in a magnificent uniform, who I understood was the Governor. He was seated on a chair, with three others on each side of him. After the captain had gone forward and made his speech to the Governor, one of the men who were seated to the left came to me, and asked if I was a Japanese, and what part of Japan I came from. I told him, and he then informed me that very luckily for me a ship, which was to have sailed for Nagasaki the day before had been detained by the illness of the *Overhoeft*, and that she would not leave till the next day but one. To my great surprise he spoke in ordinary Japanese, though with a strained accent. I thanked him for the kindness of the Dutch in restoring me to my own country, and was then taken to the dining room, where I was invited to sit down and eat. Chopsticks were provided, and a bottle was produced which I was told was Japanese *sake*. It was very thick and strong from age.

While I was here a lady, who I supposed was the governor's wife, came into the room attended by a number of

women. Her dress was strange, but so beautiful that I have no words to describe it. She no doubt came out of curiosity to see what a Japanese was like.

The next morning the official who had talked to me in Japanese brought me five pieces of silver, with which he advised me to lay in a stock of fish for use on the voyage, as the ship supplied nothing but rice. I accordingly provided myself with a bundle of fish of the shark kind, and bought other supplies with the money I had brought from Banjar Masin.

On the following morning the captain took me on board the larger of two vessels which were about to sail for Japan. This ship had eight officers, including the captain, lieutenants, and doctor, who occupied the after part of the middle deck, except the captain, who had the upper cabin. He had control of everything in the ship. The others had each their own duties, and nothing to do with anything else. There were ten blacks who attended on the officers, and one hundred and thirty sailors, and there were also mechanics, such as blacksmiths and carpenters. Counting myself, there were one hundred and fifty-three persons on board. The cabin of the officers was very pretty. It was fourteen or fifteen feet square, and the ceiling was handsomely painted in various colours with figures of lions and tigers. Food was prepared separately for the eight officers, and a bugle was sounded for their meals. For the others rice was boiled in a great pot, and when a bell was rung every one came and received his allowance in a bowl. When dinner was over, the fire was put out and the kitchen door locked. For drink we were allowed five *go*¹ of water in a bottle. After the water was served out a lock was put on the cask, and no more could be got. The crew provided themselves at their own expense with dried fish, which they ate raw. Those who liked spirits kept a bottle of brandy in a locker, but this was also provided by themselves. As I was not on the ship's books as a sailor, I was given an allowance of brandy

¹ About $\frac{1}{4}$ th of a gallon.

every other day, and my fish was cooked for me. I was also allowed to sleep close to the officers' quarters, and in other respects was very kindly treated.

Three days after leaving Batavia we anchored at a place called Palembang, where we waited for our consort. When she arrived, the officers of the two ships entertained each other, and made their plans for the long voyage which was before us. All their arrangements seeming to have been completed, the small boats were hoisted up and stowed on board, sail was set, and we proceeded on our course night and day.

The officers used to go up on the poop and observe the horizon from time to time with a glass three inches in diameter, mounted on a stand.¹ There was a compass, divided into forty-eight points, by which the ship was steered; and the depth of the sea was sounded with a cord one hundred and fifty fathoms long, to which was attached a leaden weight. I thought this an admirable practice. The crew were not prevented from sleeping during the day, but at night not one of them was allowed to do so. The officers called out from time to time, and the whole crew of over a hundred men shouted in reply, to show that they were awake. This was done every night.

After thirteen days at sea, we reached the south-eastern end of a small island named *Kaoshpora*, so called from its shape, which is that of a Dutchman's shoe, *kaosh* meaning 'shoe' and *pore* 'island.' I was told by the blacks that this was a very curious island, for, if ships kept away from it, it sucked them towards it, and would not let them go, and that this was the reason we sailed so close to it. They also told me that in fine weather it looked like an ordinary shoe, but when the sky became overcast it stood up to a great height.

At this place our consort had fallen behind, so we shortened sail and waited for her. While doing so a large vessel hove in sight, flying a flag with a white cross on a red ground. I was told that this was a French ship. The

¹ A sextant or an octant?

Dutchmen were much alarmed, and immediately hoisted a similar flag. They also loaded their cannon with shot made of iron chains wrapped up in sheet lead. These are for the purpose of breaking the masts of the enemy's ship, really an excellent invention! Muskets, balls and powder were served out to all hands. I shuddered to find myself in such an unlooked-for danger, after I had gone through so much, and was now on my way home to Japan. The enemy approached within two hundred yards, and then, for what reason I do not know, sailed off in an easterly direction.¹

Three of the crew fell ill during the voyage. One of these did not report himself to the officers as ill, and for this offence against discipline he was dragged out, thrown on his face, and received seventy-two blows on the buttocks with a tarred rope three feet long. The skin and flesh were beaten into a jelly, and, although a plaster was put on, the man died. The two other sick men also died, in spite of the care taken of them. They were all buried at sea.

Eighty-one days after I left Banjār Masin, we arrived at the island of Takaboko (Papenberg) in the entrance to the Nagasaki harbour. Cannon were fired at intervals until we came to the anchorage, when more guns were let off, and the ship was brought to an anchor. We then landed at the Dutch factory of Deshima. The date was the 16th day of the 6th month of the 8th year of Meiwa (A.D. 1771). I was then examined by the officials and lodged in the Sakura Street prison, where I remained till the 21st of the 8th month. Orders then arrived from the Yedo Government to hand me over to the authorities of my native province.

NOTE BY THE CHIKUZEN EXAMINING OFFICER.

The Governor of Batavia received a reward of fifty bales of rice, the chief of the factory of thirty bales, and the captain of the ship of twenty bales, for the part they had taken in restoring Magotarō to his native country.

¹ It subsequently appeared that this ship was not French, but Danish.

ART. IV.—*Methods of Archæological Excavation in India.*

By A. REA, M.R.A.S., Archæological Department,
Madras.

AFTER devoting two successive seasons to investigating some of the Buddhist mounds in the Krishnâ and Godavari districts of the Madras Presidency, and having on occasions conducted excavations at various other places, the experience thus gained may be of service, if placed at the disposal of those whose duty or pleasure it is to conduct such interesting work.

Apart from the charm attendant on touring about from place to place, and the observing of the quaint peculiarities found in almost every locality, the archæologist finds much to interest him in his own branch of Indian research. Not the least fascinating part of Archæology is that devoted to the excavation of ancient remains, which have lain for ages buried in the earth. It is not, however, without its drawbacks, such as the local superstition of the people, who, misunderstanding the motives for such work, connect it with the search after treasure, so dread a visit from the demons supposed to guard it, and use various means of stolid resistance to hinder its being carried out. One may make every arrangement before visiting the place, get the usual order from the district officer to the village-Headman, and afterwards on going there be told that, though the Headman has made every effort, no coolies can be got. A suggestion that it might be necessary on my part to mention this circumstance to the district-officer, usually results in the appearance of a few coolies, but without spades or other implements, and they assert that there are none to be had in the village. After another similar hint to the village-Munsif that these tactics are too stale to deceive any one, the coolies appear fully armed for work, and then, when it is seen that these

men are paid their wages daily, and that the work itself is not exactly what they thought it would be, they turn up by the hundred, each with his spade, crowbar or basket, and no difficulty is afterwards experienced. It may be as well to say that the wages should never be handed to the maistries or overseers, but to the coolies themselves, either individually or in groups. Should this not be attended to, the coolies will gradually decrease in number, and, if private inquiries are made, it will be found that the maistries have been appropriating a not insignificant portion of the men's pay—varying from a fourth, more or less—for their own use and benefit. The coolies themselves will seldom come and voluntarily offer a complaint.

Even when the work is fairly in hand, there is constant worry and anxiety, for one may be almost certain that if he leaves any part of the work to be attended to by another, something will go wrong in the place he has just left. He must therefore be continually on the alert for any discovery, or any blunder on the part of the coolies.

Kinds of labour available for work.—It may be broadly stated that one should never attempt too much at a time. No matter how extensive the work to be done, no more should be taken in hand than what can be personally supervised. This method of work is more laborious, and takes more time, but it is the most satisfactory in the end. If the labourers—the coolies of India especially—are left to themselves, they will smash right through a wall, and, without the least hesitation, destroy, perhaps, as far as they can, the very object for the uncovering of which, the work is being undertaken. With a very few exceptions, it seems impossible to make any of them understand or appreciate the motives which prompt the work of archæological excavation. Indeed, they believe the real object of the digging is treasure, and that the searching after a wall is only a blind too transparent to deceive them. They think they are too clever to be thus taken in, and so believe that it really matters little whether they smash up masonry or not. Even some of the educated or wealthy classes do not appreciate the full worth

or value of excavation for the elucidation of the early history, arts, and customs of India. One wealthy Zamindâr lately asked me, if Government were not searching after treasure, what possible motive could they have in spending money digging into old mounds?

It saves an immense amount of worry and anxiety if one is able to procure one or two trustworthy and intelligent maistries or overseers to stand over the coolies while they are at work.

Though some coolies may perhaps know they are digging for a wall supposed to be in a certain position pointed out to them, they go right ahead like an unthinking machine, destroy the wall they are digging for, and remove the debris along with the earth, without seemingly ever seeing it.

The damage is only discovered when you next take your round of that particular spot and see the section of the wall, they have cut through, on each side of the trench; you stop the work, and set them to excavate along the face of the wall. In this part of the work they do very well, for they have an object before them, and as long as it keeps straight, or curved, as the case may be, they are all right; but, should there be a break or a turn one way or another, they are at a loss, and dig straight on, even though they may know they are cutting through brickwork instead of earthwork. When everything has to be done with material of this sort, it will be apparent the need there is for efficient personal supervision in the carrying out of such investigations, where every object brought to light should be scrupulously left uninjured, and in position.

2. *Buddhist and other mounds; with surface indications.*—Archæological research has now proceeded far enough to enable us to know what classes of buildings—the work of various religious sects, belonging to a particular date—we may expect to find in certain localities; and the approximate limits within which they are only to be found. This, combined with a knowledge of the style of works these races erected, enables us to carry out the work of excavation in a scientific manner.

After one has gained some experience in the work, one can almost instinctively tell what sort or class of building is in a mound, and whether a mound covers a building or not. He will be able to distinguish between a mound formed by nature over the remains of a building, and another, such as a tumulus, raised artificially. It is sometimes difficult to decide which is which, without actual excavation. With this knowledge he can select a spot for the trial trench which will come on the wall without unnecessary waste of time, labour, and expense.

Of all the sites in Southern India as yet explored, those of the Buddhists are the most ancient, and have been the most fruitful in interesting results. They yet offer an almost inexhaustible field for archæological research in the northern districts of the Madras Presidency. The Krishnâ district alone is particularly rich in large numbers of unexplored remains of the Buddhist period. These mounds have now been tabulated, and they only await excavation to reveal their treasures.

Many of the mounds have no traces of walls on the surface, but there are numbers of other indications which enable the expert to judge whether there is anything there, and in a certain way will let him know whether or not the results will justify the outlay. Herein lies the wisdom of a good selection of the spot for the trial trench, for on it should depend whether the digging is to be carried on or stopped. In most cases this can be so decided. It is obvious, however, that no one can say exactly what is, and what is not in a mound, and of course any one is capable of proving it, by digging it all over, or completely removing it, even though the work should be fruitless in results and the reverse in expense. This, however, is not scientific excavation, but it is exactly the difference between the work of an expert and that of the novice. Only the very minimum of expenditure should be incurred on a mound until such time as its nature is fully proved. If the remains, the expert expects, exist, then the work should be carried on with energy. But should the reverse be the case, then the

explorer, who works after scientific methods, will not have the mortification of having wasted a large sum of money without anything to show for it. Others, again, think the proper way is to drive one or more wide trenches right through a mound, cutting it into two or more separate parts, trusting to pick up whatever comes in the way. But this is a very destructive mode of procedure, and has nothing to recommend it. The diggers forget the simple fact that, as the building was the original cause of the mound being formed, so, if the structure is there, they will find traces of it by simply tapping the outer edges of the mound; of course carrying in their trenches for a sufficient distance from the outside. If these come on nothing, then it is useless to cut right through; but if it is thought that remains do exist, the better proceeding is to try a trench at another point.

In most of the Krishnâ mounds as yet examined there was no masonry on the surface, but on some part, of all those where remains were discovered, there were either a few, or perhaps numbers of fragments of large-sized bricks, chips, or fragments of marble sculptures, and chunam or broken pottery. Any, or all of these point to there being something underneath the ground. Should there be no indications of that or other kind visible on the surface, then if the explorer's funds are limited he should seek new pastures, for his finds will probably be nil. There are exceptions of course, but they only prove the rule. Two instances recently occurred. At Garikipâd, in the Krosûr taluk, a stûpa was discovered in a mound, which had on its surface all the indications above noted. Two miles to the west, is another mound, almost identical in shape and size, but without a brick or anything of the sort visible. Within this I was from the first doubtful of finding anything, but considering the identity in form with the other mound, thought it best to prove the matter, and drove in a trench for a short distance, but the work of a few coolies for the greater part of a day was sufficient to show there was no building there, though the section proved that the mound was artificial, being prob-

ably a tumulus. Another instance occurred with three mounds named *dipaldinné* at Panidem in the same taluk. There were no indications on the surface to show the existence of buildings, almost every foot of earth being searched in vain. Trenches had been previously cut right through each, by an officer of the district, without result. They were, however, at a level with the ground surface, and might thus probably have gone over the foundation walls of a building, had it been ruined in its upper walls. They were thus inconclusive, and, to prove the matter, pits were sunk at the points where the trenches entered the mounds, only to come on a natural bed of kankar at a few feet below the surface, and show there was nothing in the nature of a building there. Setting aside the want of anything on the surface, one was tempted to go against his judgment thus formed, and fondly hope that a discovery would be made, for the name is the same as that of the Amarāvati mound, and has the same legend of a dancing-girl having lived on the top, a story peculiar to almost all Buddhist sites in the district.

3. *Theoretical formation of mounds.*—From observations of various examples of different dates, it would seem that mounds, through course of time, become more extended, and of flatter slope than they at first were. A reference to the accompanying sectional sketch of a buried stūpa will explain the theoretical formation. (See Plate I.)

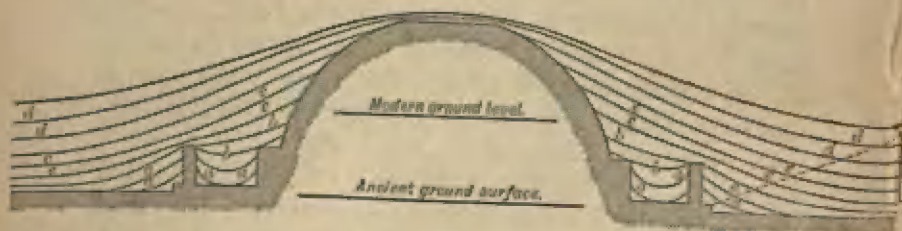


PLATE I. *Section of a buried stūpa.*

The soil first lodges in the corners of the building, forming small banks (*a*). The hollows between these again become levelled up (*b*), and, as the process goes on, they latterly form one continuous slope (*c*). The structure, thus far, has acted as a direct obstruction to the particles of dust and sand which, carried by the wind, are thus arrested, and go to form the mound. But after the building is covered up, the obstacle to the passage of dust is lessened, and it lodges in the hollow at the base of the mound (*d*) in greater quantities than it does near the summit. The slope, therefore, becomes less steep, and the area more extended. If the process were continued indefinitely, the mound would gradually become less and less distinct, till it was nearly or quite level with the raised ground surrounding it. Another natural process has its share in modifying the shape of the mound; this is through the continuous and heavy rains which fall at certain seasons in India. Though the rain-clouds probably discharge a quantity of suspended mineral or organic matter, which lodges on the mound, the rain must carry down from the upper surfaces more particles of soil than it deposits. The heaping up and levelling or washing down processes, therefore, go on continuously year by year, and give the mound an individuality quite distinct from a natural hillock. Some of the mounds now covering buildings have been formed artificially, for some purpose or other. Examples of these are seen in some of the stûpas at Guntupalle, where a packing of stones has been used. Explorers will therefore not omit to carefully scrutinize any mound which has not what might be called the orthodox shape.

Distance between ancient and modern ground levels, with methods of excavating a mound.—In beginning the work of excavation one must always bear in mind that all remains are more or less under the present surface of the ground, mostly in proportion to their age; it may be a few feet, ten or twelve feet, or more. This is more noticeable in the tropics than elsewhere, for dust and sand-storms play a very important part in altering the ground-surface. When the buildings were erected, the surface was lower than it is now,

so that, independent of the real mounds themselves, one has to dig down and look for the ancient base or floor-level at a variable distance underground. Temples can be seen, only two or three hundred years old, with their bases perhaps one or two feet underground. Buildings offer an obstruction to dust and other particles of solid material carried by the wind, so that in time not only is the building itself covered by a mound, but the earth surface is raised or covered by gradually increasing layers for some considerable distance around. Where human habitations—especially those built of mud—are near, the process is more rapid than it might otherwise be. Buildings that stood on ground once more or less elevated may now be at a lower level than the surface as it now is. This may be partly explained by a less accumulation of earth having formed over them than is found on another which has probably stood on what at the time would be level or depressed ground. For instance, some pre-historic burial-places near Madura are now quite level, but some tombs are above ground, while others are several feet below it, showing the ancient surface had been irregular. It may also be mentioned that the existence of a former city at Māmallapuram, near Madras, had been questioned, because there were no indications of any such remains on the surface. This can be accounted for in various ways, but the principal one is that the ancient surface lies under an accumulation of sand from eight to ten feet or more in depth. It is necessary to give some prominence to this fact, for I have known of instances where it did not seem to be appreciated. Explorers should thus bear in mind that when they dig a trench into a mound, they should not only work forward, but should also go downwards at the same time, as shown by the dotted line on the foregoing sketch; else, if the upper portions of the building they are looking for be at all ruined, they may pass right over it, and erroneously conclude that there is nothing to be found. They must also take into consideration any probable breaks in the wall through which the trench might pass without touching it. Where there is any likelihood of this, the trench should be sufficiently wide, and driven in

obliquely to the run of the mound, when almost certainly the wall will be found at some point or other. The form of the mound follows and shows the shape of the building, be it round as a stûpa or apsidal-ended like a chaitya. Could we be so fortunate as always to find a complete or unruined building, no difficulty would be experienced, as a trench at any point would touch the building, and the rest would be easy work. But we have, in almost every case, to deal with buildings that have served as quarries to the surrounding villagers, probably for centuries, and therein lies the difficulty of carefully tracing out such portions as remain complete. One must therefore have a thorough knowledge of the class of buildings which are likely to be found, and know every feature of the plan, so that if a prominent part is wanting, he may know the proper place to look for another that will guide him where to dig. When the first trench hits on a fairly complete portion of the building, an expert can almost always—by comparing its position in regard to the slope of the mound—accurately set off other trenches, and approximately mark off the spots where the remaining portions of the walls ought to stand. It will usually be found that the space from the bottom of the slope to the position of the wall, is approximately the same all round. All this can only be acquired by the instinct born of experience, for almost every mound has its own peculiarities, and it is thus difficult to lay down any hard and fast rule. One can afterwards almost take in at a glance what should and what should not be done. In examining a circular mound, which it is thought may probably cover the remains of a stûpa, one has to picture in his mind's eye the form of the original building as it stood complete, making an approximate estimate of its size with reference to the present extent of the mound. He can then fix on the spot where the wall is likely to be found, and start his trench just outside it, working with the greatest care when that point is reached. He will be guided in his calculations by drawing a rough sketch section of the outline of what the complete building may have been, and then producing lines down from the summit to the ground-line

to represent the natural slope of an earthen bank. This slope, however, it must be remembered, is a variable one, depending on the age and condition of the building (see remarks on Plate I.). Should the top of the building be ruined or demolished and removed, as is usually the case, he will make allowance for it in his sectional drawing. The shape of the mound will act as a guide, for the natural slope will begin at and proceed downwards from the position occupied by the upright walls; the space inside will be a flatter slope, so that the dividing line is easily noticed. A useful illustration can be made by taking a small model of, say, a stûpa or some similarly shaped object, letting a small shower of sand cover it from the top, and then finding what proportion the diameter of the object bears to the diameter of the mound of sand which covers it. If he gets their relative proportions fixed in his mind, he will, when he begins actual work, first compare the height, breadth or diameter, and slope of a mound, and then fix the beginning and probable end of his trial trench, so as to do as little unnecessary digging as possible. Circumstances vary in almost every instance, and these must determine the position of the first trench. A useful rule, however, is to fix a point just outside the slope, sink a pit a few feet, and then cautiously drive the trench from this spot inwards, about right angles to the line of the plan of the mound. The depth should be increased as the trench advances inwards. These remarks apply chiefly to mounds covering one building only. The work is of greater difficulty when a large mound covers a group of several structures.

5. *Mounds covering more than one structure.*—In this case, the configuration of the ground should be closely studied, and if the explorer exercises his judgment, and works cautiously, he ought not to go far amiss. Perhaps a mass of broken pottery or other debris will point to there being a building on one particular part of the large mound. He will then study any irregularities in the mound at this point, noting every rise or depression in the surface, and, if this is done with care, he will be able to approximately trace the

plan of the building below, for he must not forget the simple fact that it is the building which causes the mound, and the mound of course follows the shape or plan of the building. Having found one building, he should trace out its plan before he attempts another, else the work may lead to confusion. Very probably one of his trenches will touch a wall of an adjoining building, in which case, he will proceed to trace it out; thus taking each in succession. Should the case be otherwise, he ought, on completing his first building, to study the other parts of the mound, select his ground, and drive in his trenches, working thus, till all is uncovered. The trenches should always be driven in from the outside of the mound, gradually working around it.

Unless he knows what building or buildings actually exist there, it is unwise to begin trenching in or near the centre, as he will be certain to damage something or other. It is thus usually best to attack the mound from the outside; this of course, when there is no solid masonry visible on the surface. Should a wall be seen above ground at any point, then circumstances must decide whether it can be trenched or not.

6. *Excavating brick-structures and sculptures.*—The tracing of a stone building is a matter of little difficulty, but with a brick structure it is very different, more especially if—as is usually the case—it is more or less ruined. One of the greatest difficulties is experienced in hard dry red earth, hardly distinguishable from the ancient bricks, which have probably much about the same cohesion as the soil itself. The trouble, in separating them, increases when the wall is ruined, or where a fallen mass of brickwork has all the appearance of a solid wall. After tracing it for some distance, it is disheartening to find it end in a maze of loose bricks, which one hesitates to dig into, fearing he may destroy some portion of the wall. The best method is to have a few buckets of water to throw gently over the bricks, and with a trowel carefully remove the loose soil from each brick in succession. Without this, it is sometimes absolutely impossible to know the decayed bricks from the red earth. The moisture at once shows the difference in colour between

the bricks and earth, and marks every course distinctly. The moist earth can then be easily removed from each brick—either with the trowel or by successive buckets of water—without the chance of any damage being done to the bricks. It is laborious work, but it is the only sure way of preventing destruction of some feature or other, and one is repaid when, after all this troublesome groping, he comes on the real wall. When fallen brickwork is mistaken for a solid wall, the earth must be gradually removed from its face by the trowel, and then working downwards, course by course, he will settle its nature by finding loose earth underneath. It may then be removed, and the digging proceeded with, but till that is determined, no more bricks should be moved than are absolutely necessary. When there is doubt as to a single brick being part of a course or not, it may be moved, and, if another lies plumb below it, it may be part of a wall, and an examination to determine this should be made; the excavator will then be guided accordingly. Very often a mass of broken brickwork covers a wall which has been dug into by some villager in search of building material; and it is hopeless to try and trace through a maze of material, some in position, but most of it loose. When this is the case, the only way is to put the digger back a few feet, increase the depth of the trench, and then again work forwards, when the solid brickwork may be found underneath the loose material. When this is reached, the trench is diverted right and left, and he has simply to follow the direction of the wall, using close supervision when any turning or break is reached. To one who has the requisite knowledge of the class of building he is going to uncover, there is really nothing more required; the principal thing is to work in a common-sense manner, and exercise close and constant supervision, leaving as little of this to others as one possibly can. It is, however, a *sine qua non* that the explorer must have at least a general idea of the plan of the class of building he expects to find, otherwise he is groping in the dark, and may be expected to do more harm than good. To any one who has not had the requisite training as an architect, Fergusson's works will be

found useful for reference. With this knowledge, when one part of the building is uncovered, it is to him a key to the whole, and he can arrange his plans accordingly. When one takes an interest in this work—and it is really of the most fascinating kind, for one never knows what interesting discovery may at any moment be made—he watches almost every spadeful of earth removed by the coolies, and so prevents the destruction or removal of any small object of interest. The earth from trenches should always be removed to some considerable distance, for, if thrown down close to the work, it may be placed over some part of the building, and much labour is wasted in again moving it. When a panel or other piece of sculpture is found, it should not be moved, neither should the coolies be allowed to dig near or attempt to clear the earth from it with their spades or picks. The earth should be carefully removed from around it, leaving about six inches of soil adhering to it. When a pit has been dug around, the earth can be picked or washed off without any damage to the carving. These remarks equally apply to walls with a projecting moulded base. When the men are digging with their crowbars in a place where marbles are likely to be found, they should be instructed never to strike a stone twice. They have a bad habit, when they once hit a stone with the point of a pick or crowbar, to sound it several times to find its size. The result may be that some delicate piece of sculpture is chipped and damaged in several places. Whenever they strike a stone in this way, they should at once stop, and scrape away the earth to see what the stone is. If the explorer is at all observant, he will at once distinguish the peculiar ring of the crowbar whenever it strikes a stone underground. He will in fact require to do so, if he wishes to find certain sculptures uninjured, for the coolies will persist in sounding all over a stone till they find a soft piece of earth. When sculptures are found lying loose and out of position, this should be carefully attended to. Another matter no less important is, that slabs should never be lifted or prised up with a crowbar: the crowbar should never be allowed to touch the stone, a

padding of wood or some similar soft material should always be placed between them.

7. *Coins and small objects.*—The best and almost only way to secure coins or such small objects is to set a number of people with sieves to sift the earth as it is removed, particularly the older soil, or that near the floor-line of the building. This earth should therefore be deposited in a place separate from that in which nothing is likely to be found. The searchers should be constantly watched, so that they may smuggle as little as possible. To further prevent this, it is best to give them, in addition to their pay, a small sum for every object they may find in their sieves; otherwise, coins and such articles will find their way to the bazar, in spite of any amount of watching. This, however, leads to another trouble which must be guarded against. They bring, and pretend to find on the spot, all the old trash they can pick up in their own houses or the bazar, simply because it is of no value to themselves or any one else. They cannot realize any difference between the value of a broken pot they can no longer use, and that of an ancient piece of pottery from the mound. They think they may as well turn an honest unna when the Sahib is there to pay them for it. One has therefore to be continually on his guard, and carefully examine every object the coolies may say they have found during the excavation, and reject all those he finds to be spurious. Another trick is to suddenly stoop down and pick up an East India Company's obsolete half-anna, a dub, or similar worthless coin—carefully smeared with mud and artificially corroded—from the floor of, say, a Buddhist stûpa about eight feet below ground, which floor must last have seen the light about the second or third centuries. The truth is, they cannot get half an anna for it in the bazar, and think they will get its value, or perhaps more, by bringing and passing it off in this way. They see no difference between one old coin and another, and think the fraud will never be noticed. These are a few of the many little ways of the mild but wily Hindu cooly, and one has just to learn to combat them by experience.

8. *Excavation of Buddhist and other classes of works.*—

Though Buddhist structural remains are usually the most interesting to which the excavator can devote his attention, they are at the same time the most difficult of successful execution. This is caused by the fact that they have almost always been utilized by the villagers as places where they might procure an unlimited supply of bricks and mortar; the burning of marble sculptures providing the latter material. The bricks, too, when they are first uncovered, have little or no cohesion left, after being buried underground for centuries, and they can only be approached with the greatest caution. It may be said that any one, who can excavate these in a skilful and scientific manner, has overcome the greatest obstacle he is ever likely to meet with in the prosecution of such work; and he may approach any other class of mounds with confidence. Though these are of the foremost importance, there are other classes of remains not undeserving of attention. Under this head mention may be made of the structural and monolithic Pallava temples at Māmallapuram on the Coramandel coast. These present no special difficulties in excavation, for they are simply covered by masses of sand, the removal of which is only a question of time and labour. The courtyard of the Chora (shore) temple at that place was partly freed of sand, and the work, though interesting in results, presented no special difficulties. A work of still another class was the excavation of a natural cave, at a place in one of the southern districts, supposed to contain buried treasure. The features of the cave were, a mass of concrete, —or natural kankar, which, it was difficult to say,—about ten feet thick, jammed in a cleft between two rocks. Water trickling down the cleft had carried away some of the soil from beneath it, leaving a cavern with a narrow entrance, of which the kankar thus formed the roof. The treasure was supposed to be buried in the cavern. The question therefore arose as to what method should be adopted to excavate the interior. To remove the kankar, several tons in weight, would be the safest, but most tedious, lengthy and expensive method. To widen the entrance sufficient for a few men to

enter and remove the earth from the floor would cost a very small sum, and the question at issue could be almost immediately decided. But against this proposal was the danger of the probability of any part of the roof giving way and falling on the workers below. An examination of the kankar, however, showed it to be almost as hard and cohesive as solid rock. It had probably stood thus for centuries, and the removal of earth from the floor could in no way affect the stability of the mass which formed the roof, supported as it was by the rocks on either side. I therefore adopted the second method, and partly dug out the interior, without result. I had then to proceed on other duty, and the work was left in charge of a local official, a Tahsildar, who, considering the second method unsafe, employed a large gang of coolies and proceeded to quarry the roof from the cavern. As was to be expected, it proved a very laborious work, and as nothing was done to the interior until the upper mass of kankar was removed, it proved much more expensive than the other mode; over ten to one. Nothing was found. Questions such as this arise in almost every instance, and one has always to decide on the merits of the case, using his discretion as to which is not only the most expedient and economical, but at the same time the surest and quickest mode of procedure.

9. *Example of the bearing of excavation on archaeological research.*—As an example of the value of carefully examining surface indications of mounds, I may conclude by noting the following. It will be necessary to briefly refer to the disputed question of the monasteries which stood near Amarāvati. It is generally allowed among archaeologists that the Amarāvati stūpa is one of the monasteries mentioned by the Chinese pilgrim Hiouen Tsang in 640 A.D. as being either the Pūrvaśilā on the east, or the Avaraśilā on the west of the capital of the kingdom of Veṅgi. It was also recorded by the same traveller that at "a little distance to the south of the city" was a "large terraced mountain" where "Bhāvavivēka, the master of the śāstras," remained in the "Palace of the Asuras awaiting the arrival of the Bodhisatva Maitrēya." It has

never been conclusively settled, which of these might be identified with Amarāvati, as no remains had hitherto been found in the neighbourhood which would account for the other two monasteries named.

Amarāvati lies on the banks of the Krishnā river, to the north-west of a plain, bounded on the north by the river, and on the east and south-west by a range of hills. The plain is from three to four miles across, and is therefore about the extent we might expect a large town to occupy. At the base of the hills directly east from Amarāvati is the village of Vaikunthapuram. On the hill above, are two ruined brick mounds with numerous chips of white marble mixed with the large bricks strewn around. They were demolished by Venkatādrī Nayudu, the Zamindar who destroyed the Amarāvati stūpa, and it is now difficult to exactly say what they have been; but the presence of marbles and certain corrugated tiles—similar to others found at some Buddhist sites—point to this having been Buddhist also.

South-east from Amarāvati, four miles distant, is the village of Pedda Maddūr, lying at the foot of the range of hills. Around these hills are large numbers of stone-circles, showing the presence of a large settlement in early times. On the hill above the village, are a series of extensive brick remains, built on terraces rising one above the other. They have been very much demolished by the above-named Zamindār, but some brick-walls, and a set of stairs connecting the terraces, still remain. Marble chips, too, are numerous, and I found a few pieces of Buddhist marble sculptures, Andhra lead coins, and some terra-cotta chaitya roof-finials, similar to others found at a large chaitya lately discovered at Guntupalle. These remains are clearly Buddhist. They have been, however, so completely demolished, that my digging only produced the results noted above; and had these been all, the existence of a Buddhist Monastery could never have been conclusively settled. But there was another part of the remains which had entirely escaped attention, even from the villagers, and this proved the most important of all, being the foundations of a brick stūpa. By the side

of the largest upper terrace, on a spur of the hill overlooking the Amarāvati plain, was a large cairn of rough boulders, surrounded by a circular piece of soil, four feet broad, enclosed by an outer ring of similar boulders. It, therefore, had all the appearances of being, perhaps, an unusually large-sized sepulchral cairn, with a stone-circle as in the adjoining tombs; and, through this, it has probably escaped attention. The surface indications were different from any I had heretofore seen. I was almost inclined to think it was simply a stone-circle; but, as the position was unusual, I decided to prove it. At one point, where there was a break in the ring of boulders, I carried in a trial trench, with the result that it touched a brick wall lying between the cairn and the outer ring of boulders. After great trouble in moving the blocks, it was traced out, and proved to be the circular foundations of a stûpa forty-four feet six inches in exterior diameter, with walls four feet thick, and a projection on each of the four cardinal points. The foundations for the walls had not been levelled before building, the horizontal brick-courses having been laid between and over the rocks. The outer ring of boulders was evidently placed as a protection to the brick base, and the central cairn had been the interior packing of the brick dome. I dug, or rather quarried in the centre, for a relic casket, and after removing a number of large blocks came on three immense ones which it was impossible to move without mechanical appliances. All these had been placed there, and below the three was the natural rock and hill soil. Some bricks were found at the bottom of the pit, and the casket may be there, though I could not get at it through the large stone blocks which were probably laid on the top to protect it.

The dome of the stûpa had been removed at some time or other, most likely by the Zamindâr; and no doubt the brick foundations would also have gone, but for the protecting boulders. In these respects it is unique in construction, and exemplifies the difficulties of laying down definite rules for the identification of such sites. In nine cases out of ten, this might have—and probably has—been viewed as a

sepulchral cairn, remarkable for its size, but for nothing else.

Now, as to the significance to be attached to these three sites, the facts are obvious, and speak for themselves. They exactly answer to the descriptions of the Chinese Pilgrim. We have Amarāvati lying at the north-west of a plain; a presumably Buddhist site at Vaikunthapuram on the east of it; and a "terraced mountain" with Buddhist remains on the south-east. Amarāvati might therefore be the monastery of the Avaraśilā school; Vaikunthapuram that of the Purvaśilās; and Pedda Maddūr, the "terraced mountain" at a "little distance to the south" of the town.

10. *General Remarks.*—It may be unnecessary to add anything further on the question of the important bearing judicious excavation has on archæological research. But it may be said that this branch of archæology ought to take precedence of all others, for it is only through it that we can gain an insight into the works of the peoples who inhabited the country in very early times. Such a vast period has elapsed since their erection that in the natural course of time they have become all more or less covered up. It should not be forgotten that all the Buddhist art treasures found in the South, which now find a place in our Museums, have been brought to light by this means, and they are unquestionably the principal objects after which efforts in this direction can be expended. Art in India reached its highest perfection during the Buddhist period, rivalling anything found in the finest periods of Classical art; and, though we have learned sufficient to enable us to appreciate these works at their full value, we have yet to learn much more than even these teach us. Inscriptional records and art treasures still lie buried underground in the many as yet unexplored Buddhist sites, only awaiting unearthing by excavation at the hands of the archæologist.

CORRESPONDENCE.

I. CANDRAGOMIN'S 'LETTER TO A DISCIPLE.'

Of Candragomin's 'Letter to a Disciple,' to the edition of which, by Professor Minayef, attention was called in your Journal for October, 1889, the Tibetan translation has now been published in the same 'Memoirs' (vol. iv. pp. 53-81) by Mr. A. Ivanovski. Besides the text in vol. xciv., he has used one in vol. xxxiii., of the sūtra-division, together with the two commentaries that follow each other in vol. xciv. The editor prefixes a list of Candragomin's works, according to the index to the Tanjur. Some of these had been already mentioned by Schiefner (resp. Wasilief) in the translation of Tāranātha, p. 152 sq., and in the Bulletin hist.-phil. vol. iv. p. 290 sq.¹ (Nos. 3578, 3605, 3606, 3747). Here we have 38 numbers, of which 29, bearing only Tibetan titles, *i.e.* being original Tibetan work, treat of ritual, hymns to different divinities, and the like; 9 only have also Sanskrit titles, and treat mostly of grammar. They are: (1) Uṇādi, (2) Candrasyoṇāder vṛtti, (3) Candragomi-praṇi-dhāna, (4) Candra-vyākaraṇa-sūtra, (5) vṛtti to the last, (6) Deṇanastava, (7) Nyūyasiddhyāloka, (8) Varṇasūtra, (9) Viṃṇaty-upasarga-vṛtti, of which Nos. 2 and 6 seem religious works, (7) logical.

May I mention at the same time that in the Saddhammo-pāyana (Journal Pali Text Society, 1887, p. 36 sq.), as Dr. Morris has kindly reminded me, most of the same subjects

¹ Ueber die logischen und grammatischen werke im Tanjur.

are treated as in the 'Letter'; note especially the 'eight evil states' in ch. 1; the misery of life as a preta (ch. 3), and as a beast (ch. 4).

H. WENZEL.

The Secretary of the Royal Asiatic Society.

2. HIouEN THSANG AND THE FOUR VEDAS.

A Member resident in the Far East writes as follows :

"In Hiouen Thsang's account of India, at the beginning of Book II., there are some things which I do not understand. Can you tell me why he does not mention the Rig Veda, while he gives as the Four Vedas, the Yajur, Sama, Ayur, and Atharva? the last two being of course not actually Vedas. Then he speaks of five sciences, the first being Śabdavidyā, Etymology. But I cannot find any trace of a Pañchavidyā anywhere. It is hard to get any information about India in the seventh and eighth centuries or thereabouts. When one gets any information, it may generally be traced to Hiouen Thsang or some other Chinese Buddhist, or later to a Mahometan."

The passages referred to will be found at pp. 78, 79 of Beal's English Translation. Perhaps some member will be able to point out what Hiouen Thsang is likely to have meant. The four Vedas, according to Beal's version, are those of life, sacrifice, decorum, and spells. The first may be the Āyur Veda, the second the Yajur, and the fourth the Atharva. The third looks as if a book on Nīti were meant. (It is difficult to say why Mr. Beal identifies it, in his note, with the Sāma Veda.)

Mr. Beal's restoration into Sanskrit of the names of the five Vidyās seems equally unsatisfactory. There are eleven Vidyās in the Brahmajāla Sutta (see Sumangala Vilāsinī, p. 93), and I know of no list of five, either in Hindu or Buddhist books. Are his five 'sciences' Vidyās at all (that is, should not the Chinese expression be otherwise restored)?

Ru. D.

NOTES OF THE QUARTER.

(October-December, 1889.)

I. GENERAL MEETINGS OF THE ROYAL ASIATIC SOCIETY.

16th December, 1889. — Sir THOMAS WADE, G.C.M.G., K.C.B., in the Chair.

The election by the Council of the following new members was announced to the Society: as Resident members—Col. Acton C. Havelock; Elkan N. Adler, Esq.; Dr. Gaster. As Non-resident members—H. H. Dhruva, Esq., B.A.; Prof. T. E. Carpenter, M.A.; Henry G. A. Leveson, Esq., B.C.S.; The Rev. Blasius d'Monte; Kerala Varma, Esq.; M. Raoul de la Grasserie; R. Waddy Moss, Esq.; E. Sibree, Esq.; His Highness the Gaskwar of Baroda.

Mr. Duka, Mr. Delmar Morgan, and Mr. Cust made to the Society, as its Delegates at the late Oriental Congress at Stockholm, the following reports:

Dr. DUKA said: My remarks will be few and very imperfect; limited time and the vastness of the subject make it impossible to be otherwise.

I shall take the liberty of saying a few words with reference to some papers which were read or were intended to be read in Section IV., namely, that of "Central Asia and of the Far East," which comprises therefore not merely Central Asia, but the Finn-Ugor group, the Ural-Altaic languages, and a great number of Turki idioms, the languages of Tibet, China and Mongolia, and likewise all the Turanian languages, if we may still use that term, also the languages of Northern and of the South and South-east of India. An extensive

field for one Section, which while at Stockholm held, if I recollect rightly, three sittings only of not more than three hours' duration each. The President of the Section was Professor G. Schlegel of Leyden, a Sinologist of great authority. Among the eleven papers inscribed for the Section seven referred to China, one to Buddhism specially; under No. 4 was put down the ethnographic map of the northern region of Norway by Mr. S. A. Friis, the two remaining papers treated on Central Asiatic languages. The few minutes therefore which are allotted to me I shall chiefly devote to these two papers.

The paper on the geographical distribution of the Ural-Altaic family of languages by Dr. Cust, is suggestive of arranging the dialects spoken in that extensive region. The author proposes to drop altogether the old names of Tatar, Onigur, Jagatai, and recommends the adoption of "Turki" instead.

The populations speaking the various Turki dialects are chiefly Mahomedan, some are Shamanists, and a few Christians, but all are influenced by linguistic elements of Arabia and Persia.

Starting from the West to East the following is the classification of the author:

1. *Osmanti Turki*, the highly-cultured language of the rulers of the Turkish empire, the vernacular of Asia Minor, of the city of Constantinople, and of the upper classes of many tracts of Africa.

2. *Nogai Turki*, spoken in Bessarabia, in the Crimea, in the provinces north of the Caucasus, and by some nomad tribes on the river Volga and inhabiting the Khirgiz steppes, in all about 200,000 souls.

3. In the province of Kazan a separate dialect is spoken, the *Kazani Turki*. A grammar of this language was published in 1876 by Gabriel Bálint, a Hungarian scholar, and a dictionary by Ostramoff, a Russian. Population about 200,000.

4. The *Chucash* people live in the European part of the province of Kazan, and in Nijai Novgorod. Their language,

according to Schott, is Turki; they live intermixed with Mordvin and Cheremiss tribes, members of the Finn branch of the Ural-Altaic family. There is a dictionary of this language by Zolonitzki of 1875.

5. On the north-west of the Caspian shore, near Petrovsk, and also on the north-east of Daghestan, we find the *Kumuk*. Mention is made of this tribe in Makharoff's work on the "Turki languages of the Caucasus." Population about 70,000.

6. The *Azerbijani Turki* is spoken in the Transcaucasian province of Russia, and in the Azerbaijan belonging to Persia. A very important language spoken by about three millions. It has a grammar, translated from the Russian by Zenker into German, and was edited in Leipzig, 1849. Bergé published songs of Azerbijani poets, Leipzig, 1868.

7. On the eastern shores of the Caspian are Transcaspia and Turkestan. Here we have a large language-field, comprising the Kurd, Persian, the Pushtu-speaking tribes of Afghanistan, and the inhabitants of Transoxania.

8. In Central Asia proper, namely, in the kingdom of Khiva, the philologists have described Onigur, Jagatai, Uzbek, etc., languages, almost indiscriminately, a practice creating much confusion. Mr. Amirkhanianz, who is a competent authority in that linguistic region, declares that Jagatai is the proper word to adopt here, being that generally known in the vernacular. We have also the learned Professor Radloff's valuable work, "Aus Siberien, Leipzig, 1884," and his comparative grammar to guide us. It is possible that the Jagatai dialect is spoken in the great desert between the Amu Daria and the Caspian Sea, and also by the nomad Yamut tribe.

9. Further north are the *Khirgiz*; their language is spoken in the steppes of the lower Volga, and in the valleys of the Tien Shan Mountains on the confines of China. Two divisions are distinguished, the *Kara* or Burut, that is, the highlanders of the Altai, the Pamir and the Tien Shan Mountains, and the *Kazak Khirgiz*, the dwellers of the plains, subdivided into several hordes. Ilminski's works are our authority here.

10. In Chinese Tartary Shaw found an archaic form of Turki. The extensive language-field of Yarkand still requires much further investigation.

11. In the north-east corner of Siberia are the *Yakut*; Böttlingk's learned monograph points out the fact, that we have here a pure Turki language, unaffected by Arab, Persian, or Finn elements, but no literature exists. The religion here is partly Pagan and partly Christian, a branch of the Russian Church.

12. There is one more possible language-field, namely, the *Bashkir* in North Astrakhan, east of the river Volga, regarding which little is known.

It would be hardly more than a speculation if an attempt were made here to trace affinities between the Turki and the languages of Corea and Japan of the present day, or the Akkad of the remote past.

Such is Dr. Cust's programme relating to the extensive and still unsettled field of Turki languages, which he was anxious to submit to the notice of philologists.

The second paper on Central Asian languages, namely, "On the Development of the Jagatai Language during the last five centuries," was presented by Mr. Amirkhanianz. The author gave a short verbal outline in German of the contents of his work, bringing before the Section the result of long linguistic investigations, a matter almost entirely new, which cannot be duly appreciated until the paper appears in print in the Proceedings of the Congress. Much interest undoubtedly is attached to the person of the author and of his work. Pastor Abraham Amirkhanianz is actually a Siberian exile, having given offence through his heterodox preaching to the Orthodox Church, and was in consequence banished two years ago to Orenburg. He asserts that linguistic names applied by European philologists to Central Asian tribes are fanciful and unknown to those whom they intend to designate thereby. He also produced a historical book treating of ancient events of Asiatic history. This work is said to contain information concerning history not to be found elsewhere. Amirkhanianz attaches great value to the manuscript,

accidentally discovered by him, and promised to offer it, in the first instance, to the Imperial Academy of St. Petersburg for publication.

One more elaborate paper was ready to be presented to the Section, but no time could be found for reading it at Stockholm, it was therefore relegated to the sittings at Christiania, namely, "On the Language and Customs of the people of Hunza," by Dr. Leitner.

Professor Schlegel's paper, marked No. 8, "The Shui-yan or the water-sheep in Chinese accounts from Western Asia," deserves special mention, and if time permitted, a detailed notice should be given of it here. It contains points of interest to the physiologist, botanist, zoologist, and the ethnographer.

A very important work brought to the notice of the Congress appeared in the course of the present year at Helsingfors, under the editorship of Professor O. Donner, entitled "Les Inscription de l'Iénissei," containing copies of inscriptions from a number of stones, found on the borders of the river Yenissei in Siberia. The first mention of the existence of these, as yet undeciphered characters, was made in a work published in Stockholm in 1730, by Philipp Johann Strahlenberg, a Swedish officer, who, after the defeat of Charles XII. at Pultowa in 1709, became a prisoner of war in Russia, where he was kept for fourteen years, being permitted, however, to travel in the interior of the empire. Further mention of these monoliths was made by Messerschmidt and afterwards by Pallas and Klapproth. In 1877 Martinow, a Russian chemist, founded a museum at Minusinsk, and since that time several other stones presenting this kind of writing have been discovered and collected. The Archæological Society of Helsingfors resolved to send during the last three summers expeditions to Siberia under the guidance of the Government Archæologist, Professor Aspelin, with the result that up to the publication of this interesting work thirty-two impressions were taken and published in the volume before us. The undertaking of copying these still mysterious inscriptions, some of which

seem to belong to a period anterior to the Christian era, is being prosecuted with vigour, but not without serious danger from the barbarous inhabitants of those regions. Some of the pillars exhibit representations of battle-scenes, of the chase, of magic scenes, of figure-heads, etc.; others contain merely characters resembling those of Asoka, or some of the Behistún engravings, or the ancient Greek or Runic letters.

My time is nearly exhausted, but my co-delegates will touch upon matters I have omitted, and furnish information of proceedings of the Congress in other departments. I beg in conclusion to say a few words of our visit to Gamla (old) Upsala, a pilgrimage to the supposed tombs of Odin, Thor, and Fryer. The special train started from Stockholm on Wednesday, the 4th of September, at 2 p.m. All along the road the inhabitants, clad in their festive attire, lined the railway, and gave hearty greetings to their King's guests. At the three hillocks, the University professors and students with banners were waiting for the arrival of the visitors. The train passed the University town, and in a few minutes afterwards arrived at Old Upsala, its destination. The weather was bright and pleasant; nothing could exceed the heartiness of the welcome and the repeated "hurrahs," which, in the Scandinavian fashion, accentuate the second syllable in a peculiarly sharp short manner. Speeches were delivered, military bands playing, and the gift of His Majesty to the Congress, a magnificent drinking horn elaborately chased, was presented. The students carried about similar horns filled with hydromel, the "mead of the gods," giving an opportunity to the strangers to taste the classic Scandinavian beverage on the historical spot. At six o'clock the train commenced its return journey, and stopped at New Upsala, the University town; through the gaily decorated streets the Congress members were led past the stately cathedral to the Aula, where a sumptuous supper was provided. A committee of the graduates, decorated with blue and yellow sashes, did the honours of the occasion, and the University choir charmed the assembly with their performances. The building is new, the steps leading to it present a noble

appearance; the porch is spacious and stately; the hall in which speeches were delivered by the professors and some delegates is the most magnificent I remember ever to have seen at any University. Over the main entrance of the hall there is the following inscription engraved in large gold letters:

Tänka Fritt är Stort

Men Tänka Rätt är Större,

the meaning of which in a paraphrase might perhaps be rendered thus:

“Free thought is a great power,

But wise thought is greater.”

The *Codex Argenteus*, exhibited in the room of the Rector Magnus, was a sight to be enjoyed. Dr. Rost, in his admirable resumé of the Congress in *Trübner's Record*, thus expresses himself: “The sight of this Ka’ba of all Teutonic philology, alone outweighed all other literary treats which were offered to the members of the Congress.”

An attempt to describe adequately the splendid hospitality provided for the Congress would tax abler pens than mine. The truly regal splendour of His Majesty the King, himself a scholar and an author, his affable condescension towards his guests at the royal castle of Drottningholm, no one who was there can ever forget; and the return journey to town, as the steamers passed slowly among islands brilliant with illuminated shores, fireworks and rockets meeting us at every turn for nearly two hours, was indeed a scene of eastern fairy tales. Another grand festival was the reception given by Count and Countess de Landberg, attended by the King and the Crown Prince also; no efforts, no expense were spared to make the entertainment a success. What shall I say of the brilliant fête given at Hasselbacken and of the parting feast, a sumptuous dinner at the Grand Hotel, offered by the Committee of Reception, before the train left for Christiania? About 450 guests, Swedes and strangers, sat down to the richly decked table, and the “*Menu*,” on which a large amount of ingenuity and scholarship, art and treasure were lavished, is a memento, the like of which no Oriental

Congress is ever likely to boast. Thus for instance, *Rissoles à la Russe* were described in Coptic, *Saumon impériale* in Sanskrit, and *Chaudfroid de volaille à la Périgord* in Syriac; the praises of Champagne and Bordeaux were sung in Arabic and in a language the alphabet of which was discovered through the tablets of Behistún!!

The Eighth International Oriental Congress was truly a marvellous entertainment.

An important question as to the place and time of the next Oriental Congress was left to be decided at Christiania; regarding which the Delegates who follow me will doubtless give an account to the meeting.

Mr. E. D. MORGAN gave an account of a communication made to Section 1 B (Semitic), by Professor Chwolson of St. Petersburg, on Nestorian tombstone inscriptions discovered in the province of Semirétchia, Russian Turkestan. Mr. Morgan began by saying that he had lately been in communication with the Professor, who desired that no detailed account of these inscriptions should be published in English before the appearance of his work, now on the point of completion, giving fuller details and examining into the question of how these inscriptions were written, vertically or horizontally. Mr. Morgan had seen some of these Nestorian tombstones at the Hermitage at St. Petersburg in 1887, and had himself visited the towns of Pishpek and Tokmak, near which the two early Christian burial-grounds had been discovered, that near Pishpek by M. Andréyeff, a land surveyor, while engaged on the delimitation of lands owned by the villagers of Alameddin; the smaller one, near Tokmak, by Dr. Poyarkof. M. Pantussof, an official resident at Verny, had described the Pishpek burial-ground, its position, and the results of excavations made there when two of the graves had been opened. Attempts to decipher the inscriptions however had failed, and it was only when they had been examined by Professor Chwolson that their true meaning could be ascertained. The difficulties in reading them were very great, owing to the fact that the characters were not deeply cut, and could hardly be distinguished from the flaws

and roughnesses on the stones, of which 611 had been counted. Another difficulty arose from the fact of the character of the writing being of a later type than the early and more legible Syriac Estrangelo, this more recent character taking the cursive form. Besides which a number of Turkish words and proper names occurred, while two of the letters were foreign to the Syriac alphabet, and were apparently borrowed from the Arabic. The assistance of Dr. Radlof was obtained for the Turkish words, and he supplied the names of the years in the Tartar-Mongol twelve-year cycle, where these were given in addition to the year according to the Seljukian era, by which the Nestorians usually reckoned. Two or three of the inscriptions were then read by Mr. Morgan, who concluded by a few general remarks on the Nestorians and the early records of their proselytizing movement in Asia, quoting Colonel Sir Henry Yule and other authorities. Drawings of the excavations and a photograph of a few of the inscriptions were handed round.

Dr. R. N. Custer remarked that the third Delegate, Professor Bendall, was absent in the South of France, so the Aryan Section would be unrepresented. As regards the Semitic Section, he called attention to the proof-sheets of the new and magnificent edition of the Massorah Text of the Old Testament, presented to the Congress by the Rev. Dr. Ginsburg, and to the interesting discovery made in the Fayûm in Upper Egypt, reported by Miss Amelia Edwards. Amidst the ruins of the villages, the epoch of which is fixed upon Egyptian data in the reign of Menesphah, the Pharaoh of the Exodus, and earlier, have been found large collections of broken pottery inscribed with forms of written character analogous to the Græco-Phœnician. Now the earliest date of existing inscriptions in the Greek characters is about 600 B.C., and of Phœnician about 900 B.C. If, therefore, these discoveries should be authenticated, and accepted, the date of the earliest specimen of this script would be carried back to 1400 B.C., and have an important bearing upon the form of character used by Moses in the two tables of the Law.

The thanks of the Society were accorded to the Delegates for their reports.

Dr. R. N. CusT remarked that, with the permission of the President, he moved the following Resolution: "That a communication be made to the Committee of the Stockholm Congress that a representative of the Oriental Scholars of Great Britain and Ireland be added to the Committee with whom rests the decision of fixing the date and place of the next meeting."

There had been eight Congresses, at Paris, London, St. Petersburg, Florence, Berlin, Leyden, Vienna, and Stockholm: on the last day of each of the first seven Congresses the place and date of the next Congress had been fixed; but this formality had been omitted at Stockholm, and a Committee appointed to settle this matter, on which the scholars of France, Great Britain and Ireland, Russia, and Italy were unrepresented, because it so happened that the Presidents of those Congresses had died. In the mean time rumours had got about of a scheme to hold the next Congress at Constantinople, Cairo, or Washington, to all of which places there were great objections. The object of this Resolution was that the scholars of Great Britain and Ireland should have a voice in any future arrangement.

Sir M. MONIER-WILLIAMS seconded the resolution.

Dr. LEITNER moved as an amendment: "That it is unworthy of the position of England, France, Russia, Italy and other countries in the East to have a representative added by co-optation (that is, individual selection) of the members of an illegally constituted committee, which is disowned by the majority of the Comité Fondateur and of the French members of the Congress, as also by a large number of members generally."

Mr. HYDE CLARKE seconded the amendment, though as a matter of order he was of opinion that it could scarcely be put as an amendment, as it amounted to a direct negative.

Mr. DELMAR MORGAN stated that he was present when the Committee was appointed, that no exception was then taken to the validity of its appointment, and that several

other scholars were asked to serve upon it, but declared their inability to do so.

It was pointed out to the Chairman that Dr. Ginsburg, not a member of the Society, but present on the invitation of a member, could throw light on the subject. On objection being raised that it would be against the rules of the Society for any one not a member to speak except on subjects of Oriental learning, Sir Monier Monier-Williams suggested that the sense of the meeting should be taken on the point. A majority were in favour of Dr. Ginsburg's addressing the meeting, but he stated that he would prefer, under the circumstances, not to speak.

Dr. Leitner's amendment was then put to the meeting, and was lost, only one member voting in support of it. Dr. Cusht's motion was then put and carried by 15 to 4.

Sir LEPEL GRIFFIN moved, and Dr. LEITNER seconded: "That the Council be authorized to call a special meeting and invite the opinion of Oriental scholars, not being members of the Society, to discuss the question regarding the place at which the next Congress should be held.

This resolution was carried unanimously.

II. LIST OF PRESENTS TO THE SOCIETY, OCTOBER-DECEMBER, 1889.

From the Secretary of State for India.—Calcutta Review.
No. 178, Oct. 1889.

From the German Government.—Berlin. Die Handschriften-Verzeichnisse der Königlichen Bibliothek.

7er band. Türkischen MSS. von W. Pertsch.

4to. Berlin, 1889.

8er band. Arabischen MSS. von W. Ahlwardt. Band ii.

4to. Berlin, 1889.

From the Netherlands Government.—Hargronje (Dr. C. Snouck). Bilder aus Mekka. 18 photos in 4to. portfolio.

From the Bengal Asiatic Society.—Grierson (G. A.). The Modern Vernacular Literature of Hindustan.

8vo. Calcutta, 1889.

From the Publisher.—Ramabai Sarasvati (Pundita). The High Caste Hindu Woman. 8vo. London, 1888.

From the Author.—Grasserie (Raoul de la). Etudes de Grammaire comparée, 8vo. Paris, 1888.

——— Esquisse d'une Grammaire du Timucua, Langue de Florida, et Vocabulaire Timucua. Two pamphlets.

——— De la Famille Linguistique Pano. 8vo. Paris, 1889.

III. CONTENTS OF ENGLISH ORIENTAL JOURNALS.

1. JOURNAL OF THE CEYLON BRANCH OF THE ROYAL ASIATIC SOCIETY.

Vol. x. No. 34, 1888 (received 4th Dec. 1889).

S. M. Burrows, C.C.S. Archæological Discoveries at Anurādhapura.

G. Vane, C.M.G. The Pearl Fisheries of Ceylon.

A. Jayawardhana (Mudaliyar). On the Devālē at Wehera-goda.

S. M. Burrows, C.C.S. A Year's Work at Pollonnaruwa.

B. Gunasekhara (Mudaliyar). Three Sinhalese Inscriptions.

Vol. x. No. 35, 1889 (received 4th Dec. 1889).

W. J. S. Boake, C.C.S. On the Ancient Site of Māntoḍḍai.

G. M. Fowler, C.C.S. The Moppiśvaram Inscription.

J. P. Lewis, C.C.S. On the 'Hil-peen-kandura' at Kandy.

F. H. de Vos. The Capture of Trincomalee in 1639.

D. W. Ferguson. A Belgian Physician's Notes on Ceylon 1687-1689.

L. de Zoysa. Buddhist Jātakas on the Bharhut Tope.

2. JOURNAL OF THE ASIATIC SOCIETY OF BENGAL.

Vol. lviii. part i. No. 1, 1889 (Received 21st Dec. 1889).

E. E. Oliver. Coins of the Muhammadan Kings of Gujarāt.

A. Gupta, Esq., C.S. Ruins and Antiquities of Rāmpāl.

C. R. Lanman. The Namuchi Myth.

Dr. Hoernle. Some New Muhammadan and Hindu Coins.

IV. CONTENTS OF FOREIGN ORIENTAL JOURNALS.

1. JOURNAL ASIATIQUE.

8me série, tome xv. No. 1, July, 1889 (received 10 Nov. 1889).

Rubens Duval. Actes de Scharbil et de Barsamiya.

Serge Larunoff. Histoire du roi Djemchid.

Van Berchem. Conte Arabe en dialecte Égyptien.

Victor Loret. Les flûtes égyptiennes antiques.

M. Alric. Fragments de poésie turque populaire.

2. ZEITSCHRIFT DER DEUTSCHEN MORGENLÄNDISCHEN GESELLSCHAFT.

K. G. Jacob. On Commerce in the Middle Ages between the Caspian and the Baltic.

I. Guidi. East Syrian Bishops in fifth to seventh centuries.

K. Himly. Expressions used in Games.

H. Jacobi. On the Udgatā.

G. A. Grierson. Selected Specimens of the Bihāri Language.

W. Bang. Achaemenian Inscriptions.

W. Bacher. On the Notation of Hebrew Accents.

V. OBITUARY NOTICES.

Colonel Joseph Ouseley.—One of the oldest officers of the Bengal Army, and a tried and sound Oriental Scholar, died in his ninetieth year in the month of November. He was born at Limerick, June 21, 1800, and went to India in 1819. In 1822 a Degree of Honour for extraordinary proficiency in the Arabic Language, and high proficiency in the Persian and Urdu Languages, was conferred upon him by the College of Fort William. In 1824 he became Assistant Professor of the Sanskrit, Marathi, and Bengali Languages: in 1825 he became Professor: for a short time he was Superintendent of the Mysore Princes, who were then domiciled at Calcutta, as well as Secretary to the College of Fort William, and in that capacity all the Members of the Bengal Civil Service, on their arrival, studied the languages under

his direction, and received from him certificates of competency, or diplomas of honour: the compiler of this notice deems it one of the greatest honours, that befell him in his career, that in 1844 he received from the hands of Colonel Ouseley a Degree of Honour in Persian. In that year he left India, and was appointed to the post of Professor of Arabic and Persian at the East India College at Hailebury, and held that post until the College was finally closed in 1859: since which period he enjoyed a well-deserved pension. In 1862 he was appointed one of the Examiners in Oriental Languages to the Civil Service Commission, and held that post till 1883, having been thus engaged since 1824, for the period of sixty years, in the teaching, and examining, of Oriental Languages.

It does not appear that he has left any published works behind him, nor was he a scientific linguist in the sense now attached to that word: he knew the languages, which he had acquired practically to read, write, and speak, and long experience had made him a first-rate examiner: his genial manner, and noble appearance, helped to endear him to all, with whom he came into contact.

On one occasion he was employed by the Foreign Office on a special duty outside his ordinary avocations. In 1857, when the treaty of peace with the Shah of Persia was arranged at Paris, and the British Plenipotentiary had occasion for a trusted interpreter, the choice naturally fell on Colonel Ouseley: he had many interviews with the Persian Plenipotentiary, and matters were brought to a satisfactory conclusion: he received the thanks of Lord Palmerston, and an honorarium of 100 guineas.—R. N. C.

Professor August Engelbrecht Ahlquist.—Died at Helsingfors, Finland, on the 20th of November last, aged 63, a scholar of rare attainments and of special erudition, whose loss, we regret to say, will not be easy to replace. His native land loses in him an accomplished savant and a poet of the first rank, and the Science of Philology an unquestioned authority on the Finn-Ugor languages. By his

own people he was beloved, as the most popular lyrical poet of their age; many of his songs have become household words in the northern homes.

Filled at an early age with a love for his mother-tongue, Ahlquist devoted himself with youthful ardour to its cultivation. After completing his academical studies, he undertook laborious journeys into the North-eastern Provinces of the Russian Empire, visiting Karelia, and the countries on both sides of the Ural Mountains, and particularly the homesteads of the Ostjak and Vogul tribes, and explored Siberia. With similar object he visited Hungary and was elected, in 1859, Member of the Academy of Sciences of Budapest. Ahlquist continued with great industry to enrich the stores of his linguistic knowledge, especially with reference to the particular department of his favourite research. On the death of Professor Lonnröt in 1863, he was elected to fill the vacant Chair of Finn Language and Literature at the University of Helsingfors. Works published by Professor Ahlquist are very numerous. The Linguistic Treatises on the various idioms of the Finn-Ugor branches were of essential value, being, in some instances, the first attempts in that particular field of research. Besides his treatises on the Finn language, he wrote a grammar of the Vot and Veps dialects in Swedish, and on the Moksha-Mordvin dialect in the German language, and he published a Monograph on the North Ostjak tongue, and made researches as to the affinity of the Magyar and Finn languages.

Ahlquist's travels in Russia were published in Swedish and in German; and the interesting account of his journeyings among the Vogul and Ostjak tribes, published in German at Helsingfors, in 1883, found an extensive circle of readers. To his mother-tongue he rendered a special tribute in his Finnish "Poetik," in which he endeavoured to lay down laws of Finnish Prosody. Another treatise on the "Culture of Words" contains researches as to the most ancient origin of Finn civilization. Ahlquist rendered also essential service in translating portions of the Scriptures into dialects quite unknown before him, and he was about to engage in more

extensive work for the British and Foreign Bible Society, when death put a stop to his useful labours.—T. D.

Professor Kremer.—In Baron Alfred Kremer, who died suddenly on Friday, December 27, 1889, at Doebling, near Vienna, at the age of 62, Austria has lost a distinguished Oriental scholar, and an eminent statesman. The deceased began his career in the Diplomatic Service, and for many years filled important posts in Egypt. In 1870 he was appointed Consul-General at Beyrout. In 1880 he entered the Taaffe Cabinet as Minister of Commerce, but gave in his resignation after six months, as he was asked to surrender on a point in which conscience was involved. He remained firm to his political convictions, although a personal appeal was made to him by the Emperor; and he left office without a single honour being conferred upon him. He afterwards described this struggle as the greatest which had fallen to his lot during his long public life. His death was quite unexpected. He had just recovered from an attack of influenza, and, considering himself quite well, took a warm bath and went out for a walk. He was immediately seized with inflammation of the lungs, and died within 24 hours. He was President of the Seventh International Congress at Vienna in 1886, and was present at the Eighth Congress at Stockholm in 1889. He had just sold his valuable collection of Arabic Books and MSS. to the British Museum.—R. N. C.

Colonel Sir Henry Yule, K.C.S.I., C.B., LL.D., R.E.—The Royal Asiatic Society has a title and aims which cover a large area of ground and embrace many kinds of Oriental learning and research. The Society is now mourning the loss of one of its members who was foremost in that department of labour in Eastern fields to which his taste and powers directed him. Sir Henry Yule was President of this Society in 1886 and 1887, and in his opening address on 17th May, 1886, he spoke of finding himself in that chair "somewhat unaccountably to himself." But his title to occupy that position was well recognized by others, though the qualifica-

tions which in his eyes scarcely justified the honour were not of the same class as those which were brought to the chair by the most distinguished of his predecessors.

It was not as an authority on any of the classic languages of the east and their literature, or as an interpreter of ancient inscriptions, or as an original explorer in the walks of eastern science, ethnology, religions, dialects, or the like; it was not on such grounds that he was chosen to preside over the Royal Asiatic Society. Apart from these, yet in contact with them all, are the lines of Oriental research which he so happily followed, and in which he was unsurpassed. To the study which aimed at presenting to English readers in pleasing and intelligible shape, eastern narratives and discussions, questions of Oriental history and geography, sciences and arts, and, generally, matters relating to Asia, ancient and modern, of real interest but little known,—to these objects of inquiry he brought qualifications of a high order,—a sound knowledge of the ancient languages of Greece and Rome, mastery of the principal tongues of modern Europe, and personal acquaintance with several eastern countries, their people and their languages; above all an insatiable spirit of research, having at its command all these helps and instruments, to be used in throwing on the matter in hand all the light that could be got, all the evidence and illustration that could be found, in all quarters, far and near. Everything he produced was characterized by thoroughness of investigation and accuracy of detail, and enlivened by a wealth of note and comment that laid all he had to say clearly and completely before the general reader, the scholar, and the critic. To this Society he rendered personal services for many years, as an influential member of the Council, whose full stores of knowledge were ever at hand, and whose experience gave him strength in the management of business. If he found himself "somewhat unaccountably" in the President's chair, the choice had commended itself amply to the Society which placed him there.

Henry Yule, son of Major William Yule of the East India Company's service, at one time Resident at Lucknow, was born at Inveresk in Midlothian on 1st May, 1820. He was

educated at the High School of Edinburgh, then under the Rectorship of Dr. Carson. In February, 1837, he joined the East India Company's Military College at Addiscombe, which he left in December of the following year, at the head of the list, and appointed to the Engineer service. After the usual term of duty and instruction at the headquarters of the Royal Engineers at Chatham, he went to India.

In connection with the first two duties to which he was appointed after arrival at Calcutta, opportunities were presented to him which gave a direction to the studies and inquiries so profitably pursued in after-years. The Kásia hills, three hundred miles north-east of Calcutta, were not much known in those days, and he furnished interesting reports of the country, the people, the iron mines, the groups of erect unhewn stones, etc., and on the climate, with the astonishing annual rainfall at Chira Punji, which may be recorded in *feet*. Then after this, when he was employed on the Western Jamna Canals, with headquarters at Karnál, chance (as we call it) threw in his way a "Canal Act of the Emperor Akbar," dated in Shawál, A.H. 978 (March, A.D. 1571), which had been obtained by his friend Captain (now Major-General) Saunders Abbott, in the course of his civil duties in the adjoining district of Kaithal. Captain Abbott's translation was printed with "some notes and remarks" by Lieut. Yule, which are a sort of brief and light index of the manner of annotation followed exhaustively in later and larger works. The papers on the Kásia hills, and this Canal Act in English, with Lieut. Yule's notes, were published in the *Journal of the Asiatic Society of Bengal*.

In 1846, after the close of the Satlaj campaign, he was transferred to the charge of the Northern Division of the Ganges Canal, then under construction. On return from a furlough to England, he was employed (1852) to examine and report upon the passes between Arakan and Burma. The report was published in the first No. of the *Papers on Indian Engineering*, printed at the Engineering College at Roorkee. About eighteen months after the conclusion of the second Burmese war in 1853, the king sent a mission to the Governor-

General, Lord Dalhousie, and shortly afterwards a return mission, conducted by Colonel Arthur Phayre, was sent to Ava. Lord Dalhousie selected Captain Yule (at that time an Assistant Secretary to Government in the railway department) to accompany the Envoy as his Secretary, mainly for the purpose of writing a narrative of the Mission. This took the form of the large and handsome volume entitled, *Mission to the Court of Ava*, published in 1858. It exhibits the completeness with which he collected such information as was then open to a British Mission to that country. Much has become known since, in which, in later years, he took the greatest interest, corresponding with travellers and others engaged in the more recent researches. The narrative of the Mission in 1855 is largely illustrated by his own drawings. The picture of the Audience Hall and Reception of the Envoy is from a sketch made under some difficulty, when the members of the Mission were seated on the floor, in a fashion very comfortless to English officers in uniform, and the Secretary's pencil was at work inside his cocked hat. The narrative is full of interest, with ample annotations, and additional matter from other sources in an appendix.

In the Mutiny days of 1857 and 1858 Captain Yule was chiefly employed at Allahabad, and it was there he completed the Burma book and wrote the Preface. On the restoration of quiet he resumed work in the Secretariat Office of the Government of India, and was soon in the same friendly relations with Lord Canning that he had been with Lord Dalhousie. The esteem with which they regarded him was greatly deepened by his having been much with them in a time of great personal sorrow,—the death of Lady Dalhousie in England, and of Lady Canning in Calcutta. His fellow-feeling with others, in their sorrows and their joys, was constant. Very many years ago Dr. Duff, in Calcutta, who knew him well, spoke to one of his friends of the deep power of sympathy in his character, and his generous support of benevolent objects. All his friends knew the warmth of his affection. The same warmth that filled his affection for his friends and sympathy with suffering could show itself also

in other ways. By nature and habit irritable, he was vexed with needless or ignorant opposition, he "resented prolix talk," as he said himself in one of his printed papers, he was indignant with everything that seemed to him to put right for wrong and wrong for right, he was often impatient, in small things as in great, even with the best of friends. Yet nothing could touch or weaken the wonderful power he had of drawing friends to him, and securing their continued friendship. His helping hand was ever ready for all who needed and desired his help for good and useful ends, and no small amount of his time, whether he was in or out of office, was thus made over to the service of others.

A time of much literary activity followed his retirement from India in 1862. Before leaving Calcutta he printed for private distribution a collection of small pieces, in prose and verse, called *Fragments of Unprofessional Papers gathered from an Engineer's Portfolio*. At the same time also was published his lecture entitled *Sketches of Java*, from his own notes of a visit to that island on a short leave of absence. The lecture was delivered a few days before his departure from Calcutta.

Coming to Europe, he resided, on account of his wife's health, at various places in Italy, and lastly at Palermo, where, after a protracted illness of many years, she died. In 1863, when Genoa was their place of abode for a time, he published, as one of the Hakluyt Society's volumes, his translation of the *Mirabilia Descripta* of Friar Jordanus. In 1866 he compiled, for the same Society, a collection of medieval notices of China, which he entitled *Cathay, and the Way Thither*. The subject of this book, and the amount and variety of material he found in the Italian public libraries, led to the preparation of the great work with which his name is specially connected, and by which he is most widely known, the *Book of Ser Marco Polo*, published in 1871. The interest attached to this work is partly in the Venetian traveller's own narrative, now translated afresh from better sources than were before available, but far more in the abundant and learned annotations supplied by the editor. The quaint fashion of the English translation gives a

medieval flavour to the story, which helps the reader to find himself listening to Marco himself speaking English. And the way in which the editor had been steeped in medieval French, when poring over the books that were to yield up their best to him, is illustrated in the story of the dream in the Preface to the second edition, of which he had made an English translation shortly before his death. It is not surprising that a second edition of this book, which is the first greatly enriched, should have been issued in 1875. It is a Marco Polo differing not in degree of excellence only but in kind from all that have gone before.

In 1873 Colonel Yule wrote an essay on the geography of the Oxus Valley, as an introduction to the new edition of the *Journey to the Source of the Oxus*, by Captain John Wood of the Indian Navy. To the Journal of the Royal Asiatic Society in 1872 Colonel Yule contributed *An Endeavour to elucidate Rashid-ud-din's Geographical Notices of India*, and *Remarks on the Senbyū Pagoda at Mengun*. In the same Journal he also published two papers in 1874, *Notes on Hseng Thsang's Account of Tocharistan* (written in 1872) and a *Note on Northern Buddhism*.

A condensed edition of Captain Gill's book *The River of Golden Sand* was published in 1883, the year after his murder in the Desert of Sinai along with Prof. Palmer and Lieut. Charrington. The geographical introduction and the memoir of Captain Gill are from the pen of Colonel Yule, as also is the memorial inscription in the crypt of St. Paul's in honour of the three. Captain Gill used to speak in the most grateful terms of Colonel Yule's great kindness to him in the course of the preparation of his narrative, and the advice and assistance he was always ready to give. So also can many others speak.

A note by Colonel Yule on the *Rock-cut Caves of Bamian* appeared in the Journal of the R.A.S. in 1886, introductory to a paper by Captain the Hon. M. G. Talbot, R.E., Captain Maitland, and Mr. W. Simpson.

In the same year, 1886, appeared one of the most generally interesting of Colonel Yule's works, the *Glossary of Anglo-*

Indian Words. It was begun in concert with his friend Mr. Burnell of the Madras Civil Service, whose early death left the work to be done by his colleague. Any one page of this book will show the amount of care and research bestowed upon it, with learning of wide range and many kinds. Few people would be disposed to look to a Glossary for entertainment as well as instruction. But they may find both in this volume, together with curious little disquisitions on curious points. Moreover, they do not need to be Anglo-Indians to find much pleasant reading in it.

A list of his works up to this time would include many memoirs of friends and brother officers. The affection he bore to them in their lifetime found some satisfaction in writing of them when they were gone. Minor pieces in prose and verse and contributions to periodicals would have to be added.

Three more volumes by Colonel Yule were published by the Hakluyt Society in 1889. One might not expect to find matter of much interest in the *Diary of William Hedges*. Very few who take up these volumes ever heard of William Hedges, or would care to know about him. But Colonel Yule, after his manner, makes the *Diary* a text on which he discourses pleasantly about the early days of the English in Bengal and other subjects, enlivening the story with sketches of the associates and contemporaries of William Hedges (afterwards Sir William), with materials for a biography of Thomas Pitt, Governor of Madras, a history of the Pitt Diamond, and notes from many quarters.

In much bodily weakness these three volumes were prepared for the press. A wasting disease had long been breaking down his physical energy, which diminished, as it seemed, day by day, till on the 30th December, 1889, he quietly passed away.

It is not out of place to notice here his deep interest in another institution which carries the word *Asiatic* in its title,—the *Strangers' Home for Asiatics* at Limehouse. From the time when his attention was first drawn to it, and he saw its work, his compassion was drawn out towards the unhappy

seafaring and other Asiatics cast adrift in London between being paid off after one voyage and being taken on for another, with little knowledge of the language spoken around them, the prey of low lodging-house keepers about the docks, and of the unprincipled of all classes. He warmly took up the advocacy of this true Strangers' Home, pleading the obligation of those who have derived some part at least of their means from India and other countries of the East to do something to help the people of those countries thus thrown among us here as strangers and foreigners. It was a pleasure to him also to find that the missionary, Mr. Small, who was attached to the Home, and visited the ships to rescue the poor lascars, was one whom he had known in India, and even so far back as High School days in Edinburgh. One of the last notes dictated from his sick bed was to his friend Mr. Fergusson, the Honorary Secretary of the Home for Asiatics, sending a contribution to its funds.

It would be going too far from the proper course of this notice of Sir Henry Yule in the pages of the Royal Asiatic Society's Journal to refer to other good objects which engaged his interest and obtained his help. But so much on behalf of the Asiatics' Home may rightly be said. It is pleasant, when we are directing our regard to his place among eastern scholars, to his services to the State, in India and at home, and to a literary and scientific Society concerned with eastern affairs, to feel how we can also respect and love his warm large-hearted sympathy with unfriended eastern people.

Colonel Yule was in 1863 enrolled among the Civil Companions of the Bath. He was appointed a Member of the Council of the Secretary of State for India in 1875. At the tercentenary of the University of Edinburgh in 1883 he was one of the men of learning who received the honorary degree of LL.D. The honour of Knighthood in the Order of the Star of India was conferred on him in 1889 (not then offered for the first time). And in the week before his death a telegram from Paris announced to him that he had been made a Corresponding Member of the Institute of France.—R. M.

Prof. Pavet de Courteille.—The death is announced of the distinguished Professor of Turkish at the College de France. He was decorated with the Legion of Honour in 1866, and in March, 1873, was elected a Member of the Académie des Inscriptions in the place of Vicomte de Rougé. He leaves behind him the following works :

Conseils de Nubi Effendi à son fils Aboul Khair. Texte et Traduction. 8vo. 1857.

Kemal-pasha Zadeh. Histoire de la Campagne de Mohaiz. Texte et Traduction. 8vo. 1857

Dictionnaire Turc et Orientale. 8vo. 1870.

Mémoires de Baber. Traduit sur le Texte Djagataï. 2 vols. 8vo. Paris, 1871.

Mirâdj-Nameh. Texte et Trad. annoté. 8vo. Paris, 1882.

He also assisted M. Barbier de Meynard in preparing the first four volumes of Maçoudi, *Les Prairies d'Or*.

VI. NOTES AND NEWS.

A translation into Urdu of Professor Rhys Davids's 'Buddhism' has been published at Muradābād.

Kalahe Ganūnanda Unnānse has published at Colombo an edition of Jñāna-kitti's 'Bhikshu - prātimoksha - gaṇṭhi - dīpaniya.'

Concert to Buddhism.—A remarkable ceremony took place the other day at Colombo. It was no less than the admission of a Christian from America, who recently arrived in Ceylon, into the Buddhist creed. The proceedings took place in the Theosophist Hall, under the guidance of the Buddhist High Priest, assisted by eleven yellow-robed monks. The convert, who was apparently prepared for the function, knelt before the assembled priests, and intimated his desire to be admitted as a member of the Buddhist Church. The High Priest then catechised him, and the assembled monks having satisfied themselves that the gentleman was fitted to be a follower of their noble teacher, assisted in admitting him as one. The gentleman, whose name was Powell, then begged of the High Priest "to

give him the Pansil," which the latter did, the candidate repeating it after him with the palms of his hands brought together uplifted. Having explained to the convert the responsible duties of a Buddhist, the High Priest gave him his blessing. A meeting was afterwards held at which Mr. Powell explained the reasons for having embraced Buddhism, and described the mental process which he had gone through before he had arrived at the conviction of the truth of Buddhism. It appears that nearly forty years ago, when he was a child, he came across a book in his father's library in which was a picture; it was that of a figure "seated cross-legged on something like a flower." Impressed by the expression of peace and love on that face, Mr. Powell got into the habit of going every evening to a room to sit in a position as nearly like it as he possibly could. "On asking who or what picture it was," Mr. Powell says, "I was told that it was the picture of a heathen god, but its memory clung to me, and when I heard its name I never forgot it, but learned later what the symbol was and its meaning." Being, as he says, naturally of a religious turn of mind, and being intended by his father to be a clergyman, Mr. Powell was well educated in the Church of England doctrines. "But," Mr. Powell continues, "I recognized and felt that there must be some law that I could work out myself, and that if I controlled my thoughts, my life manifested an obedience to that power, but it was long before I recognized that this was the 'Law of Right Thought.'" After some time spent in cogitating on the vanity of human affairs, and the inexplicability of mundane problems, Mr. Powell appears to have sought a refuge in agnosticism, as many men have before him; but the comfortlessness, and the apparent cowardice of a doctrine that says, "I cannot know, so I will leave the matter alone," seemed to have disgusted him. At last a *deus ex machina* was found in Sir Edwin Arnold, whose poem "The Light of Asia" aroused in Mr. Powell the desire to take refuge in the Law of Lord Buddha. Karma, which, as we understand it, is the Buddhist conception of

the way in which the quality of actions, whether of merit or demerit, determines the future condition of all sentient beings, cleared away his doubts, and showed him what he thought was the true light. At the same meeting a Miss Flynn and a Rev. Mr. Leadbetter (a gentleman well known to Theosophists in Madras), were also alluded to as recent converts.—*Ceylon Times*.

Prof. Minayeff, who has finished his edition, for the Pali Text Society, of the Commentary on the *Katthū-vatthu*, has an edition of the *Sāsana-vaṇṇa* ready for the press. This Pali work, composed in Ceylon, gives many new details of the mediæval history of Buddhism in India. When it is completed, Prof. Minayeff intends to edit the *Gaṇḍa-vyūha*.

Oriental School of the Imperial Institute.—Professor Max Müller will deliver the inaugural lecture of this school, of which an account was given in our last volume, at the Royal Institution on Saturday afternoon, January 11, 1890.

Mr. Justice Telang.—Mr. K. T. Tellaug, C.I.E., a member of this Society, and well known as an Oriental scholar, has been appointed to the bench of the high court in Bombay.

Kashmir MSS.—The State Council of Kashmir has, on the proposal of the British Resident, Col. P. Nisbet, sanctioned the publication of a systematic catalogue of the Maharaja's Collection of Sanskrit MSS. at Jammu, under the editorship of Dr. Aurel Stein, Principal of the Oriental College, Lahore. This collection, although of recent date, having been mainly formed by the late Maharaja Ranbir Singh, is one of the largest in Northern India. It contains over 4000 works, and among them a very considerable number of ancient Sanskrit MSS., purchased for the late Maharaja at Benares and elsewhere in India. The Library is preserved in the Raghunath Temple at Jammu, and has not been previously explored by a European scholar. It is mainly due to the interest shown in the matter by Rāja Aman Singh, the president of the Kashmir Council of Regency, and by the Resident, that the preparation of a scientific catalogue has now become practicable.

The Rāja-taraṅginī—Dr. Stein has been engaged, since a visit to Kashmīr in 1888, in researches relating to the Rāja-taraṅginī of Kalhaṇa, the Royal Chronicle of Kashmīr, with a view to a new edition of this work. During a more recent sojourn in the "Happy Valley," Dr. Stein was fortunate enough to secure the Codex Archetypus of all extant Kashmīr MSS. of the Rāja-taraṅginī, written in the seventeenth century, for the purpose of his edition, and to devote some time to the identification of ancient localities mentioned in the work. A visit to the shrine of Vijayeśvara, the modern Bijabōr, was rewarded by the discovery of two Sanskrit inscriptions in Śāradā characters. One, dated in the reign of King Rājadeva, goes back to the early part of the thirteenth century.—*Academy*.

VII. REVIEWS.

WASILIEF'S NOTES ON BUDDHISM.

Professor Wasilief read, in the Imperial Academy of St. Petersburg, in February, 1887, May and October, 1888, some notes on Buddhism, which by his kindness the present writer received a short time ago, and an abstract of which will probably be found interesting.

1. *On the proper name of King Ajātaśatru*. This name is translated in Tibetan and Chinese alike (*Ma-skyes-dgra*, 未生怨), 'A foe not yet born,' with reference to his malice against his father. But in Tāranātha he is called, besides, *Mthong-lan-dge-ca*, i.e. 'Seeing' happiness,' which Schiefner (Tāranātha, p. 2) tentatively retranslates *Kshemadarśin* (assuming that the parts of the name had been transposed in translation, as in that of Bindusāra), and thought it might be the same as *Prigadarśin* (*Pigadasi*). This name of Ajātaśatru I had hitherto only found in Tāranātha, but now, occupied with the publication of part ii. of my 'Buddhism,' I find in the Chinese commentary on the Vinaya of the Mahāsaṅghikas, called *Sui-fuin-liū-ming-i-pao-i*

3 'Gifted with sight.'

(西分律名義標釋), vii. 20 sq., the following: "In the Nirvāṇa-sūtra is said: Ajātaśatru (阿闍世) is thus called because he has not in him a germ (of Buddha's nature), whence appeared vanities and enmity, and from these he did not see the nature (properties?) of Buddha. But when he saw the nature of Buddha they began to call him *Po-lo-lü-ci* (婆羅留支—Vararuci?), which was formerly translated (in Chinese) Fingerless (魚指), because, when he was born, the fortune-tellers said: 'Woe!' And the king had him thrown from a tower, but he did not die, and only lost one finger, whence the name arose. But the domestics preserving him called (him) *Shan-tsan* (善見) 'well looking,' 'the fair.'"

In another passage of the same book Devadatta says to the crown-prince Shan-tsan: "The people revile you." The prince asks, "Why?" "Because the fortune-tellers foretold that you would kill your father, the strangers called you Ajātaśatru, but the domestics, in the intention to save you, called you Shan-tsan, but (the mother-queen) *Vei-ti*, hearing the prophecy, when she bore you, threw you from a tower, wherefrom a finger was broken, and people therefore called you also *Po-lo-lü-ci*."

What word in Sanskrit, meaning 'fingerless,' corresponds to *Po-lo-lü-ci*, we cannot decide; but on first view we must, it seems, take it for *Vararuci*, 'shining with love' [? or 'shining sweetly,' *lyubo-blestyashci*], and see a translation of this in the Tibetan *Mthong-ldan-dge-ea*, and the Chinese *Shan-tsan*; and not restitute the Tibetan into Priyadarśin (as Schiefner does); only in the first of the above passages *Shan-tsan* is distinguished from *Po-lo-lü-ci*. The name *Vararuci* is often mentioned in Tāranātha (p. 4, f. 55, etc., in Schiefn. transl.), but it is rendered there by *Mchog-sred*. The epithet *Shan-tsan* is applied, not only to Ajātaśatru, but also to Aśoka. There is in Chinese a vinaya called *Shan-tsan-bi-no-sha-liū*, (善見毗婆沙律 = vinaya veipashia?¹); there Mongolians-putra *Di-siū* addresses Asoka: "Oh *Shan-tsan*, great king!"

¹ Prof. Wasilief probably means *vibhāṣā*.

Therefore it seems more probable to see a title in Shan-tsan (Piyadasi). If this be so, we could not be sure that all the monuments with the name Piyadasi belong to Aśoka only. At least the question as to Piyadasi remains open. Shan-tsan is more a translation of Piyadasi than Vararuci.

[I would remark that the Tibetan *Mchog-sred*, i.e. 'Best desire,' is apparently a better translation of Vararuci than Prof. Wasilief gives? Mthong-ldan-dge-va could scarcely be a rendering of Vararuci, since *ruci* is an abstract; the proper meaning of *vara* is 'best, excellent,' just like *mchog*. To Schiefner's restitution could only be objected that *dge-va* oftener means 'virtue' (kuṣāla, etc.) than 'fortune.'—H.W.]

2) *A New Era of Buddha's Death*.—In regard to the common Chinese era of Buddha's death, 1027 a.c., I have already shown in the "Religions of the East," p. 84, that the Chinese added 500 years, when the Taoists, making use of the tale that Lao-tsi, living before Buddha, went to the West, had started the tale that he was the father of Buddha. First, probably in consequence of the persecution by Pushyāmītra or Pushpamitra (see Schiefner, *Tāran.* p. 81; 305 sq.), in Tibetan also called *Btsun-pa*, the duration of the Law was, in Buddhist theory, on account of the admission of women, reduced from 1000 to 500 years. But when they saw that the Law continued after that period, they established ten periods of 500 years each, every one (period) with its own characteristic; in one asceticism will flourish, in another philosophy, in another meditation, etc. There is another means which the Tibetans use to determine the chronology, viz. they give for the most important events in Buddha's life month and day. But they do this differently in different books, e.g. his birth falls, in the *Kālacakra*, within the last winter month, but in the *Lalitavist.* at the end of spring; according to the one he died on the 8th of the last winter month, according to the other on the 8th of the last spring month. From this dissonance about such important dates on one side, and, on the other, the general agreement, e.g. as to the place of the first sermon and several unimportant institutions, we must apparently conclude that these dates had not received

any attention before Buddhism had attained a certain degree of development. As also the passage of the stars is indicated in connection with the above notices, the Tibetan astronomers determine the time of Buddha's death differently, varying from more than 2000 unto 876 B.C., and alone the Kashmirian Çakyaçrī comes down as low as 543, that is, the Singhalese era. [Note.—This is another sign of the connection of Kashmir with Ceylon, of which Prof. Minayef, in his *Buddhism*, p. 64 n., mentions one from the *Abhidharmakoçavy*. which says that the doctrine of the Sixteen Worlds of Form is Kashmirian, but it is known also to Pāli sources.]

In discussing (i. 118) the different dates for the death of Buddha given by Hiouentsang, viz. (until his time 630 B.C.) 1200=570 B.C.; 1500=870 B.C., or finally more than 900, but less than 1000 years (*i.e.* 370-270 B.C.), Koeppen rejects them all and declares for the Singhalese era. But I cannot agree with him that Buddhism should have spread earlier in Ceylon than in the west and north-west of India itself and beyond. Each country naturally boasts of an early acquaintance with the Law; the Chinese tradition is that it was brought there in 60 A.D., but its real appearance there scarcely can be earlier than the fourth century. Against the last date of Hiouentsang (900-1000) its very indefiniteness seems to speak, but *Buston*, who wrote his history of Buddhism in the year 1322 A.D., after mentioning the other eras, says that some, on the ground of the *Kālacakra*, count from the death of Buddha to his time 1613 years, *i.e.* that Buddha died 291 B.C. This near agreement between the Chinese date and *Buston's* shows that there must have been some foundation, some, though erroneous, arguments. We do not demand the acceptance of this date as doubtless, but we think that on the same grounds the Singhalese cannot be so accepted.

It seems also that the following considerations must not be disregarded. When was it seen that any religion reduced its antiquity? Do we not see in Buddhism itself the endeavour to ascribe many clearly modern institutions and doctrines to Buddha himself? The Chinese and Tibetans give us a

continuous series of the patriarchs. Only the 28 of the Chinese are not sufficient for the time up to 495 A.D., nor the 54 of the Tibetans for the time up to Buddhahadra (413) as given in the *Cau-an*, i.e. for 700 years, placing the death of Buddha in 291 B.C.—much less for the more than 1000 years from the Singhalese era. The patriarchs, or perhaps only famous abbots, could not, of course, succeed to the patriarchate when they were young. The order and account of these so-called patriarchs (see *Cu-san-tsang-tsi* 出三藏記 xiii 27 sq.) has high importance in Chinese Buddhism. According to the doctrine accepted in it, no one might read or learn any sacred book for himself, he must hear it from some master, from whom he received, so to say, the authorization to study it. A short account of this transmission is constantly given in the books, and is, of course, the best means to determine their composition. We have here an approximate, though indistinct chronology. If there are omissions in these lists, we must admit their incorrectness.

In the Chinese history of Buddhism, Fo-tau-tung-tsi, all patriarchs up to the 19th, Gayata¹ (? Ce-ē-do), begin to reign from the accession of some Chinese Emperor, consequently the chronology must be regarded as fictitious. Only from Gayata onwards the years of accession of the patriarchs no longer coincide with those of the emperors; we may therefore rely upon them. Gayata succeeded in 147 A.D., and this date is near enough to the acquaintance of the Chinese with Buddhism to suppose that they should have collected accounts on the celebrities nearest their time, in India. In 172 succeeds the 20th, *Vasubandhu* (in the *Cu-san-tsang-tsi*, mentioned above, *Vasubandhu* is the 44th, *Nāgārjuna* the 34); in 190 the 21st, *Manulo* (*Manoratha*?), in 196 the 22nd, *He-le-na* (*Padmaratna*?). He lived under the king 'Fearless Sea' (*U-wei-hai*, *Abhayasamudra*?), who reigned in middle India, and it was the disciples of He-lena who went to India. Finally, in 209 succeeds the 23rd patriarch *Āryasinha* (*ārya=taun-ce* 尊者=*tsun-pa*, elsewhere corresponding to

¹ Jayata?

bhadanta). Thus for the rule of four patriarchs we have in all 62 years. The rule of Śiṃha is given in the Fo-tsu-tung-tsi as 60 years (in the Fo-tsu-tung-tsai only 50), till he was beheaded by the king Mi-lo-ku in Kashmir (see Schiefner, *Tāran.* 306 sq.); but this is probably a wilful prolongation. Nevertheless we are struck by the fact that from 291 a.c., the year given by Buston, to 209 a.d., the accession of Śiṃha, just 500 years elapsed, the time predicted for the duration of Buddhism; and the violation of the harem by the Kīrttikas, which was the cause of the persecution, reminds us that it was in consequence of the admission of women that the promised duration of the Law was so far shortened. In the same Fo-tsu-tung-tsi we find it recorded that under Gayata's predecessor, the 18th patriarch Kumārata, 1000 years since Buddha's death were completed. This at once transfers this era 500 years back, i.e. to the ninth century b.c. mentioned by Hiouentsang and Buston, 250 years less than the former Chinese era (1027), which itself had been formed by the addition of 500 years to the Singhalese date, as the latter by the addition of 250 to that of Buston. Even if we admit that this Piyadasi, who calls himself contemporary of Ptolemy and Antiochos, is indeed Aśoka, we cannot push the death of Buddha higher up than 376 b.c.

And how shall we put implicit faith in the Singhalese date for the accession of Aśoka (Dharmāśoka, if we admit two Aśokas, with the Singhalese, which I am not prepared to do), viz. 218 after Buddha's death, while all his Chinese and Tibetan biographies (translated from Indian ones) give us 116 (others 100)? Whom shall we believe? the Singhalese, who maintain that they owed the Law to the brother of Aśoka, under whom already the despatch of missionaries had been resolved upon, or the Tibetans, who drew their information from the part of India nearest to them? Who is nearer the truth—who gives more years or who less? Ere Buddhism came to Ceylon, it must have spread in Southern India. Instead of doubling the number of years, would it not be better to halve it? Tāranātha (see Schiefner, transl. p. 73) tells us that the Indians formerly counted a half-year as a

year (just as a month was divided into two parts?). In the Chinese biography of Aśoka he appears contemporary of Yaça and Upagupta. Though to the first 120 years are given, the second lived 100 (according to others 50) after Buddha's death, *i.e.* just as much (*viz.* 50) as passed from the date of Buxton to 240 A.C., the date of Piyadasi's inscription! Finally, we must not forget the well-known drama of Kalidāsa, where Virūdhaka, friend of Candragupta, is mentioned as murderer of Artasiddha. This latter was the own name of Ākyamuni, and Virūdhaka destroyed Kapilavastu.¹ Some of the Ākyas found refuge with Ākyamuni; even if he did not lead them out of the ruin, then, at any rate, he instituted for them that beggar-order out of which Buddhism developed.

3. *The Bhikshus' Entertainment*.—Extracts from a manual of behaviour for a bhikshu when entertained by the faithful from the Chinese vinaya of the Mahāsāṅghikas (Mo-he-sen-ci-lūi). If they are bidden to guest on any special occasion in the life of a layman, as death, birth, etc., they must not, on receiving their food, say any of those popular and superstitious sayings, etc. (common in India), but a pious sentence or wish (*smoṇ-lam*=*fa-ian* 發願=*pranidhi*), *e.g.* at the birth of a child he shall not say:

The babe, thrown among tombs,
Can live seven days, sucking (his) finger,
Not subject to the attack of flies and gnats;
That is the power of the babe's merits.

But: This babe vows himself unto the Buddhas, Tathāgatās, Vipacī, etc. They will take care of him like parents, etc.

In the course of this treatise is given, on the occasion of the rules to be observed at a feast given by a merchant when starting on a voyage, an enumeration of the constellations (*sin*, elsewhere called *su* 宿 *i.e.* *nakshatra*),² seven in each quarter, as also eight heavenly women (天女 *svargastri*=

¹ See Kern, vol. i. p. 253 sq.

² The names of these are in Chinese (often very corrupted) transliteration, but in some cases, it seems, a translation is given instead; *cp.* Réaumont, *Mél. As.* vol. I. p. 212 sq.

apsaras), which latter it will be perhaps interesting to reproduce here, as Prof. Wasilief, though he has, with Prof. Minayef's help, reconstituted the Sanskrit form of some, yet could not find the original of all the Chinese hieroglyphs, and others, perhaps, may be more fortunate. They are:

a) In the East: 1. *Lai-ce-ma-ti* (Lakshmimati?). 2. *Shi-sha-ma-ti* (Çrīmatī, i.e. Siri^o). 3. *Min-cen* (名稱 the 'famous, celebrated,' Yaçaskirti?). 4. *Yē-sha-to-lo* (Yaçodharā?). 5. *Hao-tse* (好覺 'well feeling,' Subuddhi?). 6. *Poloshi ma*. 7. *Po-lo-fu-to*. 8. *A-bi-ka-lo*. Further, the heavenly king, Dhṛtarāshtra, reigning over the Gandharvas, and the monument (caitya) called *Gun-chan* (弓杖 'bow-stick?', by Minayef restituted to Capālamba), which emits a clear light and is revered by all gods (the conclusion always being, 'may all these beings preserve thee!').

b) In the South there are the following eight apsaras:

1. *Lai-ce-mo-di*. 2. *She-mi-lū-di*. 3. *Ming-ceng* (=a, 3). 4. *Ming-ceng-ci* ('possessed of glory' = Yaçodharā?). 5. *Hao-tse* (=a). 6. *Hao-tsi* (好寂 'loving quietude' or 'good quietude'). 7. *Hao-li* (好力 'good force,' Subalā?). 8. *Fei-luan* (非斷 'not cutting through'). Further, king Virūdhaka ruling over the spirits (*gui-shen*) Kumbhāṇḍa and the caitya, *A-bi-po-shi* (abhipaṣya? Wass. writes *abipashiya*), etc., as above.

c) In the West: 1. *A-lan-fu-po* (Alamvarahū?). 2. *Tsa-fa* (雜髮 'Entangled hairs' Miçrakeçā?). 3. *A-li-ta* (Arishtā). 4. *Hao-guan* (好光 'Good light,' Suprabhā?). 5. *I-ka-ti-she* (Ekadeçā?). 6. *Na-po-sui-kyā*. 7. *Tsi-se-ni* (Kṛṣṇā?). 8. *Sha-to-lo*. Further the Nāgarāja *Po-lū-ni* (Varuna) and the mountain *Yao-i* (饒益 'Rich gain,' Ashta?) within which sun and moon dwell.

d) In the North: 1. *Ni-lo-ti-bi* (-devī?). 2. *Sū-lo-ki-bi* (Sūradevī?). 3. *Gūi-ca(kha?)-bi*. 4. *Bo-top-mo* (Padmā?). 5. *A-ni*. 6. *Pi-li*. 7. *Ci-lo-ni*. 8. *Ka-mo*. These eight maidens have [?] the heavenly king *Po-lū-na* (Varuna, see c) who rules the world. Further, there is the mountain *Ci-lo-su* Kuilāsa?) inhabited by spirits (*gui-shen*), who all shall shield thee, procure thee gain and quick return.

4. *Entertainment of the bhikshu s.* *I-tsing's* description of the ceremonial at such in India (*Nan-hui-gui-wei-fa-cuan* [Nanjio Cat. 1492; Beal, *Life of Hsuen-tsiang*, *Introd.* p. xxxii sq.], ch. ix.).¹ Having invited the clergy for a fast-day (齋日) the giver of alms provides all utensils and couches; the vessels must be of copper cleaned with salt; for each guest is provided his own small divan. If the vessels are earthenware, they may only be used once and then must be thrown away; the same with wooden ones. Lacquered vessels (imported from China) are not used generally as they admit fat; but may be used if the fat odour has been washed off with pure salt. The floor of the house must be smeared with cowdung, the small couches placed, and clean vats filled with much water, wherewith the bhikshūs on their arrival wash their feet, after having looked whether there are no worms (pāpake) in it. Shortly before midday the host announces it is time. Then the bhikshus wash their hands with powder or mould, take the vessels and leaves (*i.e.* plates) and wash them with a little water. Before dinner no prayers are said. The host, having washed hands and feet, first sacrifices to the hl. saṅgha in the first row, and then deals the food to all monks. At the end of the rows is a dish with food as offering to the mother *He-li-li* (阿利底), who once, according to a previous prayer, devoured, as a yaksha, the children of Rājagṛha, but was finally converted by the Buddha; she is powerful against illness and sterility. In great temples they place in the refectory a wooden statue of Mahākāla, king of the spirits, of 2-3 feet. As to the food itself, they first mix ginger and salt,² and, carrying it about, with a deep reverence before the highest seat (the highest dignitary present) say "*san-bo-lo-ke-do*," *i.e.* welcome (-āgata?). The answer is 'likewise.' He who waits on the guests must hold the dish with both hands, closing together his legs and bowing reverently; bread or fruit he puts down at the

¹ Only a general view of this last article is given, as *I-tsing* goes into all details, and Prof. Waddell promises a translation of the whole of *I-tsing*.

² This was the first of the Vaiṣṇavian heresies according to the *Mahābhāṣya* (Schleier, *Tāra*. 288).

distance from the hand of one hand breadth, dishes with other food one or two inches, otherwise it may not be accepted. Then they give gruel, a drink from dry rice, and a thick gruel of beans; pouring over it hot sour milk, and, mixing with the hand, adding condiments, you eat with the right hand to half-satiety. Then they give 'rolls' and fruit, afterwards milk or cream with sugar; they drink cold water summer and winter. All is done in superfluity, so that when I (I-tsing) intended to entertain the clergy in the kingdom Tamralipta economically, I was warned it was no use, as they were used to superabundance. After the dinner the poorest even give presents as they can. Then they rinse their mouth and gulp down the water; out of a small vessel they wash the right hand and rise. Before rising they take with the right a full hand of food, that, on their exit from the house, they may not omit the act of Buddha and the Saṅgha.

One dish of food is dedicated to the dead (先亡=preta), and other spirits, of whom is spoken in the sūtra on the Gṛdhrakūṭa mountain; this dish is, with a genuflection, handed to the president, who, after a short prayer, takes it, goes out to a solitary place or the dense forest, and there offers it. It is the same custom, when, between the rivers *Tsān* and *Huai* (in China) they place, after the entertainment, a dish outside the temple. When parting, the monks say: "All blessed works may be fulfilled (to thee) in joy." Then they depart; that each of the monks should say a gāthā is not law. The leavings are distributed to the poor, who wait; or, in a year of scarcity, and when the host is known as niggardly, the monks carry them off; it is not the custom for the host to keep them (as in China). Sometimes images and pictures are put up by the host, when, before dinner, prayers are said before these. The host lights lamps and strews flowers. At the end of the dinner he sprinkles all with water, and the president pronounces a short *Dānagāthā*. In this manner there is a double kind of food (i.e. entertainment?) in the West, quite otherwise than in China. In the vinaya it is said, "half of a *pushani* (bhojana), half a *kedani* (khādana);" *pushani* means gulping down (food), *kedani*

chewing; *half* means five (foods), what the ancients called "the five right ones," viz. 1) gruel (飯, bread); 2) gruel of wheat or beans; 3) butter-cake (麩); 4) meat; 5) cakes (餅 "rolls"); the five chewed foods are: 1) roots, 2) stalks, 3) leaves, 4) flowers, 5) fruit. If you eat the first five you may not eat the other five; but if you have eaten the second five, you may eat the first five. *Milk* and *cream* are not mentioned in both series; in the Vinaya there is even no special term for them; it is clear that they are not included in the number of proper foods.¹ If in some food, made of meal, the spoon will not enter, it is reckoned as cake; if in some dry meal food, mixed with water, traces of the fingers are seen, then it is reckoned among the five gulplings. Though I could not visit all the frontiers of the five Indias, that extend in each of the four quarters four hundred stations (yojana?), yet by questions I know of the peculiarities of their gulping and chewing. In the northern country is sufficient flour, the western is rich in pancakes (*cao*), in Magadha is little flour but much rice, etc. They eat no garlic or salat in the five Indias, therefore they have no pain in the stomach nor obstructions. In the ten islands of the Southern Ocean the entertainments are more liberal still, often enduring for three days, chiefly if the king himself is host.² But in China an entertainment (*cai-fa*) is held otherwise; there the host takes away the remnants, the clerics may not. Only when the host expressly bids them, they may do so with measure. After mid-day they read a short sūtra, and sometimes depart only before night. At parting they say "*sādhu*," and add (? they answer) to this, "*a-nu-mo-to* (anumoda).

In the northern countries with all the *Hu*, in *Dukolo* (Tokhara) and in the kingdom *Suli*, is yet this special custom, that the host first, with baldachins of different colours, makes offerings to the caityas, when all the troop go round (pradakṣiṇa), and one chosen from them says prayers. The form of the baldachins is described in the book "Description

¹ The words are, of course, all I-tsing's own.

² There is again a detailed description.

of the Western Countries" (*Si-fun-tai*). But among the clergy are some that fulfil the *dhūtas*, beg alms, wear only three robes; if one should give them gold and silver, they throw it away like spittle; they hide their traces in inaccessible forests.

Note.—This means that even as late as the seventh century there were followers of those ancient Buddhists who had not adopted life in a monastery.

H. WENZEL.

VERSUCH EINES WÖRTERBUCHES DES TURK-DIALECT, VON
DR. W. RADLOFF, OF THE RUSSIAN ACADEMY. 1st and
2nd Parts. St. Petersburg, 1889.

In the preface, in parallel Russian and German columns, the author tells us of the circumstances which led to, the object of, and his particular qualifications for, the compiling of this important and unique work. He resided many years at Vernoe in the employ of the State, and then moved to Kasán on the Volga, where he resided many years: he resides at present at St. Petersburg, within the walls of the Academy: he had thus ample opportunities of informing himself of the different forms of language of the Turki Branch of the Ural-Altaic Family, and he has been labouring at the work since 1859, or thirty years, and, as the materials grew, he has made three distinct compilations: he has incorporated all the words contained in any of the works of previous authors. Even now he modestly describes his work, not as having any pretence to completeness, but as a "Versuch" or attempt, and yet it will consist of twenty to twenty-five Parts, each containing twenty sheets, or a total of many thousand quarto pages. It must be remembered, that it is a Comparative Dictionary, giving under each word the various forms, which are presented in each language, and every word has a distinct and independent entry. Each part costs one Rouble and twenty Kopeks.

The importance of this work cannot be over-estimated, and

¹ 西方記, a book unknown to us if it is not the same as the 西域記.

its appearance is most timely. Each sheet, as it passes through the Press, is submitted for the observations of Professor Ilminsky of Kasán, Kasas in Sympheropol, Amirchanians, the well-known Bible-translator in Orenburg, Professor Budenz, in Buda-Pest, Kunes in Constantinople, Professor Baron von Rosen in St. Petersburg, and Professor Salemann, Librarian of the University of St. Petersburg. Professor Vambéry of Buda-Pest, and Professor Pavet de Courteille of Paris, have also lent a helping hand.

Professor Radloff was good enough to present me with a copy of the two first fascicules at St. Petersburg, when I visited the Academy last September: it was peculiarly acceptable, as I had read a paper the previous week at the International Oriental Congress at Stockholm on the "Distribution of the Turki Branch of the Ural-Altaic Family of Languages," an effort to define accurately the Language-Fields of Central Asia, and this Comparative Dictionary with its accurate and carefully arranged word-store will greatly assist the inquiry.

The Osmánli-Turki, generally called Turkish, is but one, and the least interesting from a linguistic point of view, of a Branch, consisting of eight or nine languages, the features of which by the compilation of linguistic books, and of translations of the Bible, are becoming gradually known to us. Much still remains to be done, both as regards Dictionaries and Grammars, and Texts, and, as the whole of the Turki-speaking populations are slowly but certainly gravitating towards the Russian Empire, it is to Russian Scholars that we must look for the illustration of the phenomena of each language.

R. N. C.



JOURNAL

OF

THE ROYAL ASIATIC SOCIETY.

ART. V.—*Early History of Kannada Literature.* By B.
LEWIS RICE, C.I.E., Bangalore.

AMONG the so-called Dravidian languages of Southern India none can boast of a higher antiquity in the cultivation of its literature than the Kannada or Karṇāṭaka, commonly called Canarese by Europeans. And yet, while the sister languages Tamil and Telugu have their votaries, Kannada has received attention from but few, if any, among Oriental scholars. This neglect is no doubt partly due to its being principally spoken in Native States, whence it has come less into contact with Europeans, while the other languages form the media of official business through a large extent of British territory. An erroneous impression has, besides, been fostered by some writers, whose acquaintance with South Indian languages was probably chiefly confined to Tamil or Telugu, that these were in some way superior either in structure or in the contents of their literature to Kannada, a statement for which there is not the least foundation, and originating in the want of accurate information regarding the latter.

A few years ago some details regarding the earlier literature of the Kannada language, the result of researches for which opportunity arose in the course of work I had in hand, were published by me in the Society's Journal,¹ but the fuller and more certain information I am now able to give,

¹ See articles on *The Poet Pampa*, in Royal Asiatic Society's Journal for January, 1882, and *Early Kannada Authors* in the same Journal for July, 1883.

especially with relation to the earliest and therefore most interesting period, induces me to return to the subject in the hope that it will not only prove of interest but attract more attention to the language.

By quotations from several of the standard poets it was shown in my former article that Kannada was not dependent for purposes of composition on Sanskrit, or Sakkada as it was called in that language; for the authors in question ridiculed the mongrel productions of those who could not write in Kannada without a resort to Sanskrit, condemning the practice as the mark of an imperfect education, and advocating purism in the separate use of the two languages. This is, in fact, what we find in the best works and inscriptions, verses in one or the other, interspersed according to the nature of the theme, thus greatly heightening the general effect while imparting to the whole the charm of variety.

The constituents of Kannada, however, are not regarded as altogether homogeneous, for they are thus described in works that have recently come to hand.

The unknown author of *Subāshita*, or *Nili-kanda*, an old Jaina work, says :

o|u-Gannada be|u-Gannada |
te|u-Gannadav accha-Gannadam Sakkajamun |
e|e-Gannada ha|e-Gannada |
salle dēsiyak ene-y-ad un|e Kannadak ileyo| ||

‘Local (or home) Kannada, white Kannada, clear Kannada, pure Kannada, and (?) derivatives from Sanskrit; young (or new) Kannada, old Kannada, being combined in the language of the country, is there any equal to Kannada in the world?’

Similarly Dēvachandra, the author of the Jaina *Rājavalī-kathe*, written early in this century, says :

ha|e-Gannada be|u-Gannada |
va|a-Gannadav accha-Gannada posat-embudu |
te|u-Gannada miśradin ida- |
n ileyo|u sat-purusbar ôdī kē|vudu satatam ||

‘This, in which old Kannada, white Kannada, local Kannada,

pure Kannada, and that called new, are mingled into clear Kannada—may good men in the world ever read and listen to.'

Haḷe-Gannada, or Haḷe Kannada, is the ancient and early form of the language. Beḷu-Gannada, or white Kannada, seems to refer to a belief of the Jains who attribute substance to sound and say that it is white. Thus Kēsirājā, in the old grammar, the *Śabdamanidarpana*, has the following :

(v. 9) śabda-dravyaṃ janiyisugum śvetaṃ.

(v. 34) śabdaṃ janiyisugum dhavaḷa-varṇaṃ akshara-rūpaṃ.

Vaḷa-Gannada, or oḷa-dēsa Kannada refers to the words called *dēśya*, or local peculiarities and dialects. Achcha-Gannada is the well-known term for pure Kannada: the well of Kannada undefiled. Posa-Gannada, or Hosa Kannada, is the new or modern Kannada. Teḷu-Gannada means clear, transparent Kannada, and from the same root is derived the name Telugu, the other language which has so close an affinity to Kannada, and which is written in the same characters.

But to proceed with the early history of the literature. In my former article I remarked : 'It would appear that the chief impulse under which the language attracted the special attention of scholars to its systematic study and culture was coincident with the break up of the Ganga power that resulted from the capture of Talakāḍu by the Chōlas, who thence extended their conquests till possessed of Vengi, whence several of the most prominent Kannada authors derive their origin.' The first part of this statement must now be so far modified that we find a high state of cultivation of the language at a much earlier period and during the supremacy of the Gangas.

The principal old poets, as I pointed out in the same paper, uniformly name Samantabhadra, Kaviparimēshṭi and Pūjyapāda, invariably in this order, as forming the earliest and most distinguished trio among the authors who preceded them. Now, according to Jaina tradition, it appears that

Samantabhadra may be placed in the second century A.D.¹ From other sources we learn that he was born in Utkalikā-grāma, and that while performing penance in Maṇuvakahalli he was attacked by a disease called *bhasmaka*, characterized by a morbid voracious longing for food together with general decay. Despairing of a cure, he resolved to put an end to himself by the vow of *sallekhana*, or starving to death. But his guru dissuaded him, on the ground that he foresaw Samantabhadra would become a great promoter of the Jain faith. He therefore advised him to break off his penance and go where he could appease his appetite, and then take *dhikha* again. The sick man accordingly made his way to Kānchi, where a pious king named Śivakōṭi was in the habit of daily distributing twelve khaṇḍugas of rice. Having secured this for himself, he ate up the whole, or nearly the whole, for several successive days, and thus satiating his appetite, got cured of his disease, and converted the king to Jainism.

His subsequent career was one of great interest, as he seems to have made peregrinations over the whole of India in search of disputants who would meet him in religious discussion, an exercise in which he attained great pre-eminence by the use of the *śyād-vāda*. The following is the account given of him in a valuable inscription at Śravaṇa Belgola,² dated in 1128 A.D.:

vandyō bhasmaka-bhasma-sātkṛiti-paṭuḥ Padmāvati-
dēvatā-

datiśāṅga-padaṣaṣṭha-eva-mantra-vachana-vyākṛita-Chandra-
prabhaḥ |

āchāryyas ca Samantabhadra-gaṇabhid yēnēha kālē
Kalau

Jainam vartma samanta-bhadram abhavat bhadram
samantān muḥuḥ ||

chūṛṇi || yasyaivam vidhā vādārambha-samrambha-
vijjimbhitābhivyaktayas sūktayaḥ ||

¹ See Dr. Bhendarkar's Report on Sanskrit MSS. for 1882-4, p. 320.

² A volume will shortly be issued containing all the Jain inscriptions at this place.

vṛtta || pūrvam Pāṭaliputra-madhya-nagarē bhērī mayā
 tāḍitā
 paścān Mālava-Sindhu-Thakka-vishayē Kāñchīpurē
 vaidisē |
 prāptō 'ham Karabhāṭakam babu-bhaṭam vidyōtkatam
 saṅkatam
 vādārtthi vicharāmy ahan narapatē śārdḍāla-vikrīḍitam ||
 avatu-taṭam aṭati jhaṭiti sphuṭa-paṭu-vāchāṭa Dhārjjaṭēr
 api jihvā |
 vādini Samantabhadre sthitavati tava sadasi bhūpa kā
 sthānaishāp ||

The first verse refers to his subduing the burning of the *bhasmaka* disease and other incidents. But the interest lies in the second verse, which is given as a quotation from himself. It runs thus: 'At first in the town of Pāṭaliputra¹ was the drum beaten by me; ² afterwards in Mālava, Sindhu and the Thakka³ country, and in the far-off Kāñchī; arrived at Karabhāṭaka,⁴—strong in warriors, great in learning, small in extent,—I roam about, O King, like a tiger in sport' (*śārdḍāla-vikrīḍita*, i.e. unopposed).⁵ What king was here addressed is unfortunately not stated. But in quoting this verse a Jaina chronicle adds two others as follows:

Kāñchyan nagnāṭakō 'ham mala-malina-tanur Lāmbusē
 pāṇḍu-piṇḍaḥ |
 puṇḍrēnduh śāka-bhikṣu Daśapura-nagarē mṛṣṭa-
 bhōji-parivrāt ||
 Vānārasyām abbūvam śasīdhara-dhavaḷaḥ pāṇḍu-rāga-
 tapasvī |
 rājan yaśyāsti śaktiḥ pravadata puratō Jaina-nirg-
 grantha-vādī ||

Of these places Kāñchī is well known; Lāmbusa I have not been able to identify; Daśapura is mentioned in the

¹ Patan on the Ganges; the Palibothra of the Greeks.

² i.e. inviting any one to discussion. A drum was fixed in a public place in the middle of the city, and any learned man who desired to enter into argument struck it as a challenge to whoever would meet him. This practice is referred to in the travels of the Chinese pilgrims in India.

³ The Panjab (see Cunningham, *Ass. Gsep.*, 148 ff.)

⁴ Kolhāpur in the South Mahratta country.

⁵ The metre of this verse is also *śārdḍāla-vikrīḍita*.

Jaina Rāmāyaṇa as near Ujjayint; Vānārasi is of course Benares. According to another account Samantabhadra also visited Kauśambi (on the Jumna, near Allahabad), where Chandraprabha, the eighth Tirthankara, appeared to him, which enabled him to write commentaries in easy Sanskrit (*miridu-Saṃskṛita*), and also, as it might perhaps be understood, in the Bhāṣhā or vernacular (? Kannada), on the various siddhānta and the six branches of āgama.

Although these remarkably extended wanderings carried him over every part of India, and give us a valuable glimpse of what at that period were considered the chief centres of learning, the point from which he started was evidently, from the name, in the Karpātaka country, and he probably wrote some works in its language. Thus he is claimed by the early Kannada poets as a predecessor of their own. The names of works attributed to him have already been given by me in my former paper.

As regards the period above assigned to him, it receives support from what immediately follows in the inscription already referred to. For, succeeding the notice of Samantabhadra is one relating to Simhanandi, who, from what is here said, taken in connection with the mention of him in an inscription published by the Rev. T. Foulkes¹ (though there rendered unintelligible from his being called *mahipa* instead of *muni*, the name being unquestionably clerical and not regal), it appears was the guru of the first king of the Ganga dynasty, Koṅguṇi-varma, and aided him in establishing his kingdom.

The following are the lines:

Yō 'sau ghāti-mala-dvishad-bala-śilā-stambhāvali-khaṇ-
ḍana-dhyānāsiḥ paṭur Arhatō bhagavatas sō 'sya
prasādi-kṛitaḥ |
chhātṛasyāpi sa Simhanandī-muninā nō chēt katham vā
śilā-stambhō rājya-Ramāgamādhva-parighas tēnāsi
khaṇḍō ghaṇaḥ ||

¹ With the sword the praise of Bhagavad Arhata, vouchsafed

¹ *Manual of the Salem District*, vol. II. p. 369.

by him, did he cut through the stone pillar the hostile army of deadly sin;¹ and had not his disciple obtained it from that Simhanandi muni, how by him was the stone pillar, which like a bolt prevented the entry of the Lakshmi of empire, cut through ?'

All the Ganga inscriptions attribute to Koṅgaṇi-varma the inexplicable feat of having cut through a stone pillar with a single stroke of his sword. The foregoing passage shows that the act resulted in the suppression of some other faith by Jainism, but it is far from clear what the stone pillar was. For our present purpose it is sufficient to point out that this transaction, so far as we have any clue to its period, is assigned to the end of the second century A.D., and therefore naturally follows in chronological order the preceding account of Samantabhadra belonging to the first half of that century.

The next specific notice of authorship is connected with Mādhava, the second king of the Ganga dynasty, who is always stated in the inscriptions to have written a commentary on the law of adoption (*dattaka-sūtra-ṭīṭh-praṇēṭā*, *dattaka-sūtra-vyākhyā-praṇēṭā*). His period is about 240 A.D.

Of Kaviparimēśhi there is a statement that he was the joint author of a work called *Prathamānyōga*. But nothing very satisfactory has been discovered regarding him. The designation implies a poet whose name was Brahma, and Kēśirāja at the end of his grammar calls himself Abhinava Brahma, but this may perhaps be otherwise understood.

Pājyapāda, the remaining member of the trio, I can now give more information about, obtained from inscriptions, and show that he belongs to the middle of the fifth century. He is celebrated as the author of the Jainendra grammar, and of a *nyāsa* or commentary on Pāṇini called *Pāṇini-śabdācatāra*, besides other works. His real name was Dēvanandi. Thus Bhaṭṭākalanka in his *Karṇāṭaka-Śabdānuśāsanam* says: *Jainēndrē 'pi tuch-chhabdam prāyūṇta Bhagavān Dēvanandi*. He

¹ *Śhānti-mala*. The Jains recognize two classes of karma, namely *śhānti* and *apānti*: the suppression of the first confers *kāicalya*, while by the suppression of both *mukti* is obtained.

was called Pūjyapāda 'on account of his feet being worshipped by the forest deities,' and Jinendra-buddhi on account of his great learning. He was unrivalled as a dispenser of medicine (*apratimauśadharddhiḥ*). He was also able to fly through the air (*gagana-gamana-sāmartthar*), showing his perfection in yōga. The water in which his feet were bathed had further the property of converting iron into gold. Having some doubts as to the Tattvārtha, he with great difficulty made his way to Eastern Vidēha (Tirhut in Bihar), where he witnessed a manifestation of the Tirthankaras that enabled him to return with all his doubts removed. Owing to the incidental occurrence of the name Pūjyapāda in a Chālukya inscription of 729, it had been proposed to place him at the end of the seventh century. But Dr. Bühler pointed out¹ the objections to identifying this Pūjyapāda with the great grammarian, who more probably belonged to the fifth century. The latter statement can now be confirmed from the discovery that Pūjyapāda was the preceptor of the Ganga king Durvvinīta, whose reign began in 478 A.D. For among the praises of this king the Hebbur plates have the following explicit announcement: *Śabdāvatāra-kāra-Dēva-bhārati-nicaddha-bṛihat-pathaḥ*—'Restricting himself to the path of greatness through the instruction of the divine who was the author of the Śabdāvatāra.'

The next distinct mention of authorship is connected with this same king Durvvinīta,² who is said in all the inscriptions to have written a commentary on fifteen sargas of the *Kirātārjunīya*, the well-known poem by Bhāravi (*Kirātārjunīya-pañchadaśa-sargga-ṭṭkākārāḥ*). His reign began in 478 and continued to at least 513 A.D.

We now come to Śrivaraddha Dēva, also called the Tumbulū-āchārya. He was the author of a work called *Chūḍāmaṇi*, which Bhattākalanka in his *Karpātaka-Śabdānuśāsanam*³ praises as if he considered it the greatest work in the Kannada language. His words are:

¹ *Indian Antiquary*, vol. xiv. p. 366.

² Wrongly attributed by me before to his father Avinīta.

³ This work with its commentaries is in the press.

Na chaisha (Karnāṭaka) Bhāṣhā śāstrānupayōginī | Tattvārtha-mahāśāstra-vyākhyānasya chaṇ-ṇavati-sahasra-pramita-grantha-sandarbhā-rūpasya Chūḍāmaṇy-abhidhānasya mahāśāstrasyānyēśhām cha śabdāgama-yuktyāgama-paramāgama-vishayāṇām tathā kāvya-nāṭakālankāra-kalāśāstra-vishayāṇām cha bahūnām granthānām api Bhāṣhā-kritānām upalabhyamānāt | ata ēva mahājana-parigrāhyā |

'Nor is it (Karnāṭaka) a language that can boast of no literature. For in it was written the great work called Chūḍāmaṇi, containing 96,000 verses, a commentary on the Tattvārtha mahāśāstra: also works on śabdāgama, yuktyāgama and paramāgama; as well as numberless books of poetry, the drama, rhetoric and the fine arts. It is thus entitled to the notice of the greatest scholars.'

This was the first notice I had met with of the work in question, whose very name is unknown. But the inscription which has already helped us throws a flood of light upon the matter by giving us the name of the author, previously unknown, and, what is of no less importance, his period. The passage referred to runs thus :

chūḍāmaṇiḥ kavīnām Chūḍāmaṇi-nāma-sēvya-kāvya-kaviḥ |

Śrīvarddha-dēva ēva hi kṛita-puṇyaḥ kirttim āhartum ||

chūṛṇi || ya ēvam upasālokito Daṇḍinā ||

Jahnōḥ kanyām jaṭagrēṇa babhāra Paramēśvaraḥ |

Śrīvarddha-dēva sandhatsē jihvagrēṇa Sarasvatīm ||

'A head-jewel (*chūḍāmaṇi*) of poets, poet of the great poem Chūḍāmaṇi, even such was Śrīvarddha Dēva, possessed of merit to acquire fame. Who was thus praised by Daṇḍin : The daughter of Jahnū (the Ganges) on the top of his head did Paramēśvara bear : Śrīvarddha Dēva, at the tip of your tongue do you bear Sarasvatī (otherwise, the Sarasvatī).'

Now Daṇḍin is placed by the best authorities in the sixth century A.D. It follows that Śrīvarddha Dēva lived either at or before that period. It is moreover abundantly evident that a work of such extent as his could neither have been

produced nor required had there not pre-existed a considerable literature in Kannada, and a widespread cultivation of the language. This consideration will dispose of any objections that might be raised against the dates previously given in this paper as being too early.

Our next notice belongs to the seventh century, when, under the date 634, Ravikirti is described as a poet whose fame equalled that of Kālidāsa and Bhāravi (*karitāśrita-Kālidāsa-Bhāravi-kīrttiḥ*). Of his works we know nothing.

We now come to Nripātunga or Amōgha-varsha, a king of the Rāshtrakūṭa line, who, as we know from inscriptions,¹ ruled from 814 to at least 867 A.D., and then voluntarily retired from the throne (*vīrēkāt-tyakta-rājyaḥ*). He wrote, among others, a work in Kannada, called *Kavirājamārga-lakṣāra*, wherein he gives some interesting details showing the estimation in which that language was held in his days. Commencing with reverence to *Atiśaya-dhara*, i.e. his father, Gōvinda or Prabhūta-varsha, he goes on to mention among works published before his time the Harsha-Charita and Kādambari in Sanskrit (the works by Bāna, who wrote early in the seventh century).

But of more interest to us here are the verses in which he continues thus:

mige Kannada-gabbanga|o- |
| aganita-guṇa-gadya-padya-sammiśritamaṃ |
nigadisuvār ggadya-kathā- |
pragītiyim tach-chirantan-āchāryyarkka| ||

Vimal-Ōdaya-Nāgārjuna- |
samēta Jayabandhu-Durvvinītādiga| i |
kramado| nega|te gadya- |
śrama-pada-gurutā-pratītiyaṃ kaikoṇḍar ||

‘Moreover in Kannada poems, possessed of unnumbered beauties in mingled prose and verse, do they sing, with the musical ring of narrative stories, those ancient āchāryas.

‘Vimala, Udaya, Nāgārjuna, together with Jayabandhu,

¹ Published by Mr. Fleet in *Ind. Ant.*, vol. xii, p. 215 ff.

Daryinīta and others, having so done, acquired fame as being gurus by rank in the hermitage of rhythmic prose.'

It is a well-known characteristic of the early Kannaḍa poems that they are *champu* works, or composed of poetry intermixed with passages in prose. Of the authors here mentioned Vimala may be the Vimalachandra regarding whom there is the following information in the inscription already quoted. Nothing more is known of him.

Vimalachandra-munindra-gurōr gguṛuḥ
praśamitākḥila-vādi-madam padam |
yadi yathāvad avaishyata paṇḍitsair
nuanu tadānv avadishyata vāg vibhōḥ ||

churṇṇi || tathā hi | yasyāyam āpādita-paravādi-hṛdaya-
śōkaḥ petrālambana-ślōkaḥ ||
patram śatru-bhayankarōru-bhavana-dvārē sadā sañ-
charan

nānā-rāja-karindra-brinda-turaga-vrātākulē sthāpitam |
Śaivān Pāsupatāms Tathāgata-sutān Kāpālikān Kāpilān
uddiśyōddhṛita-chētasā Vimalachandrāśāmbareṇādarāt ||

'Vimalachandra munindra guru, reverencing his feet as having dispersed the pride of hostile disputants, should not his directions be followed by pandits? That is to say, he whose is the (following) *ślōka* beginning with "patra," which was a grief (*śōka*) to the mind of opponent speakers. This leaf (or writing) did he fix up on the big (or street) door of his house—terrible to enemies—where were ever passing by many different kings, groups of fine elephants and troops of horses—describing the Śaivas, Pāsupatas, the sons of Tathāgata (Bauddhas), Kāpālikas and Kāpilas: thus with eager mind did the Digambara Vimalachandra out of respect.'

Udaya would seem to be the Udayāditya who is mentioned in other poets, but that the latter has been placed by me at a later period than the one we are writing of, on the supposition that he was identical with the Ganga prince of that name who was a minister and general under the Chālukya king Bhuvanaika-malla.

Nāgārjuna is a well-known name, but I regret that I have not succeeded in getting much information about him. Pūpyapāda had a nephew, it appears, of this name, but it is not clear that he was a literary character. There is a Nāgārjuna who Professor Weber says¹ is mentioned with great honour in the opening of the Nandī and Āvaśyaka sūtras in the list of teachers.

Jayabandhu I am unable to identify, but there was a Bandhu-varmā who was the author of *Haricaṃśābhyaudaya* and *Jitasambōdhane*.

Durvinita is the Ganga king already mentioned in a previous part of this paper, and the present reference to him as one of the distinguished poets of the country is unique in its interest and importance.

After a verse referring to Guṇasūri, Nārāyaṇa, Bhāravi, Kālidāsa, Māgha and others as having written great poems (that is, in Sanskrit), Nṛpatunga goes on to say that in like manner the old poets (*purātana-kavigaḥ*) wrote poems (*chattāṇa*) in Kannada. Unfortunately the verse cannot be quoted, as there are errors in the copy, and it is imperfect. But he continues as follows:

parama-Śrīvijaya-Kavi- |
śvara-Paṇḍita-Chandra-Lōkapālādigaḥ |
nīratīśaya-vastu-vi- |
stara-vīrachane lakshyaṃ tad-ādya-kāvyaḥ endum ||

'The supreme Śrīvijaya, Kaviśvara, Paṇḍita, Chandra, Lōkapāla and others—their great excellence in style and in expanding the subject is ever the mark of that early poetry.'

Of these authors, Śrīvijaya is quoted by Kēśirāja. He is also thus mentioned in the inscription already more than once referred to:

Gaṅgāvanīśvara-śirō-maṇi-baddha-sandhyā-
rāgōllasach-charaṇa-chāru-nakhēndu-lakshmīḥ |
Śrī-śabda-pūrvva-Vijayānta-vinuta-nāmā
dhīmān amānuṣa-guṇō 'sta-tamaḥ pramāṃśuḥ ||

¹ *Sacred Literature of the Jains*, translated by Dr. H. W. Smyth in *Ind. Ant.*, vol. xviii, p. 181.

chûrṇṇi || stutô hi sa bhavân êsha śrī-Vādirāja-dêvêna ||
yad-vidyâ-tapasôḥ praśastam ubhayam śrī-Hêmasênê
munau

prâg âsit suchirâbhiyôga-balatô nītam parām unnatim |
prâya Śrīvijayê tad êtad akhilam tad-vidhikâyām sthitê
sankrântam katham anyathânatichirâd idrig-vidhê dṛik-
tapah ||

'The moons of the nails of his feet illuminated as with the hues of evening from the jewels in the crown of the Gaṅga king, was he whose name was first the word Śrī, followed by the famous *Vijaya*; learned, of superhuman qualities, of a glory dispersing ignorance. Praised also has he been (as follows) by the great Vādirāja Dêva: Both the learning and the penance gained by long practice which were formerly in Hêmasêna muni, passed in full to Śrīvijaya who occupied his throne: if not, how did he so soon combine them?'

I am unable to throw light on these allusions, but Vādirāja himself is thus described in the same inscription:

trailôkya-dīpikâ Vâṇi dvâbhyâm êvôdagâd iha |
Jinarâjata êkasmâd êkasmâd Vādirâjataḥ ||
âruddhâmbaram indu-bimba-rachitautsukyam sadâ yad
yaśâś
chhatram vâk-chamarīja-râji-ruchayôbhyarṇnam eha yat-
karṇayôḥ |
sêvyas simha-samarechhya-piṭha-vibhavas sarvva-pra-
vâdi-prajā
dattôchechair jjayukâra-sâra-mahimâ śrī-Vādirâjô vidâm ||

chûrṇṇi || yadiya-guṇa-gôcharô 'yam vachana-vilâsa-
prasarah kavīnām ||
śrīmach-Châjukya-chakrêśvara-jaya-katakê Vâg-vadhâ-
janma-bhūmau
niskândan dīṇdimah paryyatati paturatô Vādirâjasya
jishnôḥ |
jahy udyad-vâda-darppô jahihi gramakatâ garvva-bhūmâ
jahâhi

vyāhārē 'rshyō jabīhi sphuṭa-mṛida-madhura-śrāvya-
kāvyaralēpaḥ ||

Pātālē Vyāla-rājō vasati su-viditam yasya jihvā-sahasram
nirggantā svarggatō 'sau na bhavati Dhishanō Vajrabhṛit
yasya śiṣhyaḥ |

jīvētān tāvad ētau niḷaya-bala-vaśād vādinah kē 'tra
nānyē

garvvaṃ nirmmuchya sarvvaṃ jayinam ina-sabbhē Vādi-
rājāṃ namanti ||

'By only two (paths) has Vānī, light of the three worlds, gone forth here below—the one, Jinarāja, the other, Vādirāja. The canopy of his fame, touching the sky, mingled with the rays of the moon; his speech as pleasing in the ears as the fanning of a chāmara; worthy to be served; possessing the greatness of a lion-throne; of great glory bestowing victory over all the opponent speakers: such is the learned Vādirāja. Regarding whose qualities there is the following saying of the poets: 'In the victorious camp (or capital) of the Chālukya emperor—a birthplace for the speech-goddess—does the Nishāṇḍa drum (*ḍiṇḍima*) of the victorious Vādirāja wander about with its pleasant sound: proud speaker, yield; learned man, give up your pride; man eager to dispute, shut up; poet of sweet-sounding verses, be silent. In Pātāla stops Vyāla Rāja (Ādiśeṣha), famed for his thousand tongues; unable to come out of svarga is Dhishana (Bṛihaspati) whose disciple is Vajrabhṛit (Indra); by the fortune of their stations they continue to live: of other speakers who are there that have not given up their pride and done obeisance in the royal assembly of the victorious Vādirāja?'

With reference to Hēmasēna, his predecessor above mentioned, the following information is supplied by the same inscription:

yatrābhiyōktari laghu llaghu-dhāma-sōma-
saumyāṅgabhrīt sa cha bhavaty api bhūti-bhūmiḥ |
vidyā-dhanañjaya-padaṃ viśadaṃ dadānō
Viṣṇus sa ēva hi mahā-muni-Hēmasēnaḥ ||

chûrṇṇi || yasyāyam avanipati-parishadi nigraba-mahī-
 nipāta-bhīti-dustha-durggarvva-parvvatârûḍha-pra-
 tivādi-lōkaḥ pratijñā-slōkaḥ ||
 tarkkē vyākaraṇē kṛita-śramatayā dhīmattayāpy uddhatō
 madhyasthēshu manīshishu kshitibhṛitām agrē mayā
 sparddhayā |
 yaḥ kaśchit prativakti tasya vidushō vāgmēya-bhaṅgam
 param
 kurvve 'vaśyam iti pratibi nṛipatē hē Haimasēnam
 matam ||

'Unruffled by accusers, of a form like the placid beautiful moon, and a place of fortune, having attained the wealth of learning and the path of purity,—such was the mahā muni Hēmasēna. Whose verse (as follows), pledging himself in the king's assembly, caused the world of opponent speakers to take refuge in the inaccessible mountain—the fear they had of being thrown to earth. In logic and grammar having taken great pains, being also well trained and raised above men of mediocrity, the proposition stated by me before the king whosoever replies to, the argument of so learned a man will I without fail break down :—such, O king, understand, is the Haimasēna creed.'

Circumstantial as these various statements are, owing to the names of the kings referred to not being mentioned, it is difficult to identify the court or period at which Hēmasēna and Vādirāja flourished.

But to return to Nṛipatunga's list of early poets. After Śrīvijaya come Kaviśvara and Paṇḍita, if these words have been rightly taken as names. There was an Īśvara kavi, but he was later than Kēśirāja, as he calls himself Abhinava Kēśirāja. He cannot therefore be the one here intended. Paṇḍita is too indefinite as a name to allow of its being satisfactorily traced. Chandra may be the Chandrabhaṭṭa mentioned by Kēśirāja. Of Lōkapāla nothing is known. It should be here stated that though the names given have been formed out of the present verse, and also in the case of the previous ones quoted, by a different division of the words

other names might be formed. At present there is nothing to guide us as to the exact names intended in some of the combinations.

But our author goes on to make certain statements which are of great interest for the history of the Kannaḍa language. The following verses may be quoted on the subject :

Kāvēriyindam ā Gō- |
 dāvarī-varam irdda nāḍ ad ā Kannaḍado | |
 bhāvisida-janapadam vasu- |
 dhā-vaḷaya-vilina-viśada-vishaya-viśēsham ||
 adaṛoḷagam Kisuvoḷalā |
 vidita-mahā-Kopaṇa-nagaradā Puligereyā |
 sad-abhistutam-app Omkura- |
 dada naḍuvaṇa-nāḍe nāḍe-Kannaḍada-tiru ||

‘The region which extends from the Kāvēri as far as the Gōdāvarī is the country in which Kannaḍa is spoken, the most beautiful land in the circle of the earth. In the central parts therein, lying within Kisuvoḷal, the famous great city of Kopaṇa, Puligere and the justly celebrated Onkunda is found the pith (*tīru*) of high Kannaḍa.’

Of the places here mentioned Kisuvoḷal is the modern Paṭṭadakal in the Kalādgi district: the city and hill of Kopaṇa are several times mentioned as places of importance in the Jaina inscriptions at Śravaṇa Belgōḷa; I am inclined to think it was near Mulgunda in Dharwāḍ¹: Puligere is the modern Lakshmēśvara in the Mīraj State in Dharwāḍ: Onkunda I cannot identify, but it may have been in Belgaum.

The verses continue as follows, giving further particulars as to a wide-spread culture among the people :

padan aridu nuḍiyalum nuḍi- |
 dudan arid ārayalum ārppar ā nāḍavarga | |
 chadurar nnijadin kuri- |
 t-ōḍadeyuma kāvya-prayōga-pariṇata-matiga ||

¹ Possibly Kopal in Mudgal in the Nizam's Dominions. Could this be the city visited by Hiouen Tsiang and called by him, through some mistake, Konkana-pura, which has never yet been identified?

kuritavar allade mattam |
 perarum tam-tamma nuḍiyol ellam jāṇar |
 kiru-vakkaḷ mā-mūgar |
 maripalk arivar vivēkamaṇ mātagalaṇ ||

Sakkadamuṇ Pāgadamuma- |
 n akkuṇ bagedante samari-pēḷal munnaṇ |
 nikkuvanoḷav appudaṇṇi |
 takkantavara vara-lakshyamāṇ lakshamaṇ ||

arid ādam Kannāḍado- |
 | tiri-koregoṇḍ aṇṇiye pēḷven embud id ārggaṇ |
 paramāchāryyaravol sayi- |
 t iral aṇṇiyar Kannāḍakke nāḍavar oḷar ||

‘Apt are the people of that land in speaking as if accustomed to verse, and in understanding it when spoken; clever in truth are they, for they are ripely skilled in the usages of poetry without giving themselves up to its study. Not only students but others are all skilful in their speech; and know how to teach both wisdom to young children and words to the deaf. To compose at will in Sanskrit or Prākṛit may be done, and in conformity with the true old canons, which is the aim and mark of the able. But very rare is this (power) in Kannāḍa, for to whom is it given to say I will write in it with soft expression as to be understood? The (only real) professors for Kannāḍa are the people of that land, and they know not how to keep silent after the manner of great āchāryas (i.e. they are ever ready to impart instruction).’

Without going again over the ground covered by my former article on the poet Pampa, it may be here pointed out how remarkably the above statements are confirmed by what he says in his *Vikramārjuna-vijaya*, written in 941 A.D. For he professes to write “naturally and without effort, in the pith (*tiruḷ*) of the Kannāḍa of Puligere, the royal city.” He also states that his works “were read by all classes of the people, by servants as well as by the greatest poets.”

Another evidence of the spread of a cultivated taste may perhaps be found in the beautiful style in which the inscrip-

tions, whether on stone or copper, of the time of the Ganga king Śrī-Purusha (who reigned during the greater part of the eighth century), are engraved.

And here it may be permitted to leave this interesting subject. From the tenth century onwards the information already published provides ample materials for the history of the language and literature. Down to that time the present article will I hope show that a mine of unexplored wealth awaits the researches of scholars.

ART. VI.—*Was the Book of Wisdom written in Hebrew?* By
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fessor of Arabic at Oxford.

§ 1.

THAT the Proverbs of Ben-Sira were written in some kind of Hebrew has never been seriously questioned, and the number of sources in which clues to the original have been preserved would be sufficient to silence any doubts that might be raised. It would be natural to suppose that the Book of Wisdom, which bears so close a relation to those Proverbs, which enlarges on so much that Ben-Sira suggests, and endeavours to be deep where he is shallow, appealed to the same public, and was composed in the same language. But although this theory would receive a *prima facie* plausibility from the Hebraisms with which the pseudo-Solomon's style abounds, his affectation of Greek eloquence, noticed by very early critics, his allusions to Greek customs, and his reminiscences of Greek authors, have seemed to put it out of court; and the best editors of this century only mention this theory to reject it. In the last century, however, it was supported by some eminent names; and early in this found an advocate in Bretschneider, the author of three dissertations on the Book of Wisdom, who had an adherent in Engelbreth. Bretschneider's arguments in support of a Hebrew original for 'Wisdom' were by no means convincing, for he produced no case in which a Hebrew word appeared to be mistranslated, but only cases where he fancied the supposed original was corrupt and required emendation; this made his restorations suffer from a compound improbability, whereas had he first obtained a solid basis for his hypothesis, the method would have been unobjectionable, as it seems in one or two cases to have been successful. Whether any one

since Engelbreth (whose contributions are of less consequence than Bretschneider's) has endeavoured to prove the proposition suggested in the title of the article, it is difficult in the vast mass of theological literature to discover; it is however unlikely that quite the same method will have been employed as that which the present writer will endeavour to follow, so that some, at least, of his observations are probably fresh. The question is of interest for the history of Jewish thought, for the history of the Hebrew language, and, of course, for the interpretation of the book itself.

If all the subsidiary sources of the text of Ben-Sira were wanting, and we had but one Greek copy, we could still discover with certainty what its original language was, by the observation that in a number of passages verses, which are obscure in the Greek, become clear when translated into Hebrew. A well-known passage is xxv. 14, 'There is no head above the head of a serpent,' words which are only intelligible when we remember that 'head' in Hebrew also means 'venom.' No less clear a passage is xviii. 17, 'the fool reproaches thanklessly,' which gives a meaning when for 'reproaches' we substitute 'does a favour,' the alternative sense of the Hebrew word which signifies 'to reproach.' Of course *one* such passage would not prove very much; but a very few would create a probability; and each fresh enigma which was solved by this key would render that probability infinitely greater.

The earliest versions of the Scriptures, the *Peschitto Syriac* and the *Vetus Latina*, were made, the first of them to a great extent from the Hebrew, the second probably from a very independent recension of the Greek. If the same key which explained puzzles in the Greek also explained differences in any number between the Greek and these ancient versions, the probability that it was a true key would be greatly confirmed. For a single case might well be attributed to accident, but a number of cases could not be due to that cause.¹

¹ The hypothesis that the Syriac version was made from the Chaldean was started by J. M. Faber, '*Prolegomena de Libro Sapientiae Orseldi*, 1773.' This

It is very noticeable in Ben-Sira that many Greek manuscripts, and all the secondary versions, contain revised renderings, a comparison of which with the renderings given by the bulk of MSS. tells us with certainty what the original words must have been. If any of the *varietas lectionis* of the Book of Wisdom can be explained by the suggested key, the probability that it is a true one will become greater still.

And, lastly, if, when the key has been tried on all these locks, it has been found to open any considerable number of them, we shall be entitled to use it as a genuine instrument; to abandon the language of metaphor, where the text of the Book of Wisdom offers difficulties, we shall be justified in endeavouring before anything else to reconstruct the original; and if we cannot always find a satisfactory answer immediately, we shall nevertheless know where to look for it.

I will endeavour in the present paper to examine these different sources in the order in which I have enumerated them, and have hopes that the reader may find reasons for thinking it possible that the pseudo-Solomon wrote in New-Hebrew, the language of Ben-Sira, and was a Jew, not of Alexandria, but of Palestine.

§ 2. *Internal Evidence of the Greek Text.*

1. xiv. 10. καὶ γὰρ τὸ πραχθὲν σὺν τῷ δράσαντι κολασθήσεται

διὰ τοῦτο καὶ ἐν εἰδώλοις ἐθνῶν ἐπισκοπὴ ἔσται :

For that which is done shall be punished with the doer. For this reason there shall be a visitation upon the idols of the Gentiles.

The former of these clauses is unsatisfactory; it ought to mean 'that which is made shall be punished with the maker,' viz. the idol with its maker; this however the Greek would not allow. There is a passage in the Midrash Tanchuma

pamphlet I have not seen; it is discussed by Eichhorn, 'Einführung in die Apocryph-Schriften,' p. 199. It may be presumed that Eichhorn quotes the best of Faber's arguments; he says that he quotes nearly *all* of them. These are all liable to the same objection as Bretschneider's (*v. supra*). I find only one of my own observations anticipated in that list, and this one which I have not given in § 3.

which suggests to us what the original idea here was (on Gen. xlvii. 12; ed. Warsaw, 1879, i. p. 56b). כֶּשֶׁם שֶׁנִּפְרָעִין מִן הָעֹבֵד כֵּן נִפְרָעִין מִן הַנֶּעֱבָד רַחֲמֵי וּבְכַל אֱלֹהֵי מִצְרַיִם אֵשֶׁת שִׁפְטִים וְכֵן אֶתָּה מוֹצֵא בְדִנְיָאֵל כִּיּוֹן שִׁפְתֵּר חֲלוּכֹו שֶׁל נְבוּכַדְנֶצַּר . . . אֲבָל דִּנְיָאֵל לֹא קִבֵּל לְמָה שֶׁכֶּשֶׁם שֶׁנִּפְרָעִין מִעֹבְדֵי כוֹס כֵּךְ נִפְרָעִין מִמֶּנָּה.

'As the worshipper is punished, so is the thing which he worships. For it is written "And on all the gods of Egypt I will wreak vengeance." And so you find in Daniel, that when Daniel interpreted Nebuchadnezzar's dream, he ordered sacrifice to be made to him. But Daniel would not accept it. Why not? Because just as the worshippers of idols are punished, so are the idols.' (The same passage is to be found in the Midrash Rabba.)¹ It is possible from this that in the passage of Wisdom עֹבֵד and נֶעֱבָד have been wrongly translated *doer* and *done*, when they should have been rendered *worshipper* and *worshipped*. Of course the first is the Aramaic, the second the Hebrew sense of the words. נֶעֱבָד 'worshipped,' occurs frequently in the Mishna of Aboda Zara. עֹבֵד *made* is used in the Chaldee of Daniel, of the image which Nebuchadnezzar made.

This observation will further elucidate the preceding verses; 'That wood is blessed by which righteousness comes about; but that which is made by the hand is accursed, both it and its maker, because he was making it, and it being corruptible, was named God.' τὸ χειροποίητον δὲ ἐπικατάρατον, αὐτὸ καὶ ὁ ποιήσας αὐτὸ, ὅτι ὁ μὲν ἡργάζεται, τὸ δὲ φθαρτὸν θεὸς ἀνομάσθη.

The wood which is blessed is the ark, or any ship; which is made by the hand quite as much as the idol; nay, more so; for some of the idols were not wrought at all, a fact with which the writer is familiar. The idol cannot therefore be differentiated from the ship by the fact that it is made by

¹ In Baber's edition for הַנֶּעֱבָד the words עֲשֵׂה עֲשֵׂה are substituted. This makes the coincidence less striking, but does not seriously affect the argument. It will be assumed throughout that these Midrashim contain old materials, at whatever period they may have been drawn up.

hand. Grimm notices this, but supposes a technical term of the LXX to be employed. Some part of the difficulties will be solved by substituting the verb עָבַד in what follows, where the Greek has 'to make.' 'But the idol is accursed, both it and its *worshipper*; he because he *worshipped* it, and it because, being corruptible, it was called God.'

Whether this is the true interpretation of these verses or not, it seems clear that v. 10 is quoted in the Midrash; and that fact alone would make it probable that the book existed in Hebrew. But, secondly, the words are mistranslated in the Greek, whereas their real meaning appears in the Hebrew. This passage by itself seems sufficient to create a fair presumption in favour of our hypothesis, and has therefore been quoted first.

2. i. 12. μὴ ζηλοῦτε θάνατον ἐν πλάνῃ ζωῆς ὑμῶν.
Do not emulate death in the error of your life.

Mr. Deane has interesting notes on all the words in the text, but fails to show that the sentiment is a natural one, or is naturally expressed. The second clause is 'nor attract destruction by the works of your hands.' The violation of the antithesis (the key to the true interpretation of some quarter of Ben-Sira's verses) in two out of the three words of the first clause also suggests that there is some error.

The words πλάνῃ τῆς ζωῆς ὑμῶν bear a strong likeness to inf. xii. 23, τοὺς ἐν ἀφροσύνῃ ζωῆς βιώσαντας; a likeness which reminds us of Eccles. xvi. 21, ἀνὴρ ἄφρων καὶ πλανώμενος. Those two words are there shown by the Syriac version to be alternative renderings of the same Hebrew word; nor is there much doubt what that word is, viz. שָׁטָה, which, when pointed with a *schin*, means 'fool,' but, when pointed with a *sin*, means 'wandering.' Although this word is very common both in New-Hebrew and Syriac, it nevertheless is constantly mistaken by the translators of Ecclesiasticus; xiii. 6, ἀποπλανήσῃ σε שָׁטָה, seems from the context to mean 'he will jest with thee.' In xxii. 6ε τέκνα ἐν καταφρονήσῃ καὶ ἀπαιδευσίᾳ γαυριώμενα, Heb. בָּנִים בְּשִׁטּוֹת וּבְחָבֹל מִתְרַבִּים, may perhaps have meant 'children bred in folly

and obscenity.' The word has here been *pointed* rightly, but wrongly derived from שׁוֹט 'to despise'; which the Syriac translator of Ecclus. ix. 7, *μὴ περιβλέπου ἐν ῥύμαις πόλεως*, Heb. אַל תִּשׁוֹט בַּחוּצוֹת מְדִינָה, wrongly introduces, rendering the verse 'be not despised in the streets of the city.' The verb שָׁמָה 'wander' does occur in the second clause of that verse, but here the Syrian translator thinks of שָׁטַר 'to write.' For *πλάνη* and *ἀφροσύνη* in Wisdom therefore we may restore שְׁמוֹת, which can mean either. *ζωή* 'life,' is sometimes a rendering of רוּחַ 'spirit'; Ecclus. xiii. 13d, *πάσῃ ζωῇ σου ἀγάπα τὸν κύριον*, is not intelligible unless we substitute for *ζωῇ* either רוּחַ or נֶפֶשׁ. That שְׁמוֹת רוּחַ 'folly of the mind,' is a possible phrase, is shown by the following passage of the Midrash Tanchuma (ut supra ii. p. 55a, Numbers v. 12).

אין המנאפים נואפים עד שחכנס בהם רוח שמוֹת שכן כתיב
כי תשמה אשתו . הרי למדנו לאשה . לאיש מגין . שנאמר
(משל'ו) נואף אשה חסר לב.

'The adulterers do not commit adultery until a *spirit of שְׁמוֹת* comes into them; for it is written of the woman "when a woman goes astray"; and of the man (Prov. vi.) "an adulterer is a fool."' This passage illustrates the confusion between שְׁמוֹת and שָׁמוֹת.

The same observation will throw light on Wisdom iii. 2, *αἱ γυναῖκες αὐτῶν ἀφροves*, 'their women are fools'; rather 'adulteresses' שְׁמוֹת.

ζηλοῦν is a regular rendering of קָנָא *to emulate*, which also means *to acquire*. These two meanings are frequently confused in the LXX; see Prov. iii. 31, Ezek. viii. 3, Ecclus. li. 18. The whole clause is then to be restored:

אַל תִּקְנוּ מוֹת בְּשָׁמוֹת רוּחְכֶם
Acquire not death by the folly of your mind.

Compare a hemistich preserved in the Latin of v. 15, 'iniustitia est mortis *acquisitio*.' It is observable that i) this is a verse of the style of Ben-Sira; ii) that the antithesis between the clauses is now perfect, *acquire* agreeing with

attract, death with destruction, mind with hands; iii) that the word שָׁמוֹת shows us that we have to do with Rabbinic Hebrew, the language of Ben-Sira.

3. i. 16. 'But the wicked have invited death by their hands and their words; φίλον ἡγησάμενοι αὐτὸν ἐτάκησαν: *Thinking him a friend they melted*, and made a covenant with him that they are worthy to be of his portion.'

Bretschneider observed that *they melted* was absurd, but his suggestion was unsatisfactory. In New-Hebrew נתפּשר means i) *to melt*; ii) *to come to terms*. Buxtorf renders שָׁנוּתָם אַחֵר by *postquam reconciliati erant*. The Peschitto of this book frequently renders τήκεσθαι by אַתְּפֶשֶׁר; and this word is used in the Mechilta and elsewhere of the manna melting. It is likely therefore that the writer meant '*thinking him a friend, they made friends with him.*'

4. iii. 14. *And blessed is the eunuch who did no wrong with his hands, nor thought any evil against the Lord; for there shall be given to him a choice recompense for his faith.*

In Syriac the word מַהִימָן means 1) *faithful*; 2) *a eunuch*. It seems just possible that the argument here consists in a play on these two meanings; otherwise it is not clear why πίστews faith, should be the merit referred to. In the Syriac הַיִּמּוֹת, however, the ideas are coupled in a way in which no other language could couple them. In this mixed language we might fancy there was another paronomasia in ἐνθυμηθεὶς — πονηρά, אַתְּרֵי רַעוּת. In any case the expression is a Hebraism and means '*plotted evil*,' in Hebrew, דַּשָּׁב מַזְמוֹת; this being so, it is probable that τοῦ κυρίου means *his master*, Heb. אֲדֹנָי; the eunuch being ordinarily a slave.

5. iv. 10. εὐάρεστος τῷ θεῷ γενόμενος ἡγαπήθη.
Being well-pleasing to God, he was loved.

This is a tautology. Nor does Grimm (who takes notice of the difficulty) get rid of it. In Chaldee אַתְּרַחַם means *he was loved*; but it also means *mercy was had on him*; and in Arabic, 'the person on whom mercy has been had' (مَرْحُوم, feminine مَرْحُومَة), the same root as is used in

Syriac and New-Hebrew, means 'the late.' Although this is not given in the Arabic dictionaries, it is a real usage. The idea that death may be a *mercy* was not first introduced by Christianity; with the Greeks a dead man was μακαρίτης, an inhabitant of the Islands of the Blessed. Compare besides B'rēshith Rabba, § 9: 'All the time the righteous are alive, they are at war with their inclination; when they are dead, they are at peace' (נחם).

6. iv. 3. πολύγονον δὲ ἀσεβῶν πλῆθος οὐ χρησιμεύσει.

And the prolific multitude of the impious shall not be of use.

In Ecclus. xiii. 4 this word occurs, 'if thou art of use, he will make thee serve him.' But, as the antithesis there is 'if thou art poor,' we should have expected in the first clause, as we expect here, 'if thou shalt prosper.' We must look out then for a Hebrew word signifying both 'to be of use' and 'to prosper'; which is by no means hard to find, seeing that צלח (Kal and Hiphil), a very familiar verb, has both these senses. The Kal sense is the regular sense of the verb in Arabic. The verse of Ben-Sira may be restored with fair probability as אַם תצלח יעבד בך, 'if thou shalt prosper, he will make thee work'; and, as often, the rhythm confirms the sense, for the Kal pointing will not suit the verse. The same remedy will restore the verse of the pseudo-Solomon, *The prolific multitude of the impious shall not prosper.*

7. xvii. 12. ἐνδοθεν δὲ οὐσα ἦσαν ἡ προσδοκία πλείονα λογίζεται τὴν ἀγνοίαν τῆς παρεχούσης τὴν βάσανον αἰτίας.

Mr. Deane renders this unintelligible verse thus: 'The expectation (of help) from within being weaker, makes the ignorance of the cause of torment greater.' A very difficult sentiment.

1. In Hebrew מלפנים can mean 'from within'; but it can also mean 'originally,' 'from beforehand'; there is a difference in the pointing, but both significations are familiar and ordinary.

2. In Hebrew תשנה שניאה can mean 'increases the ignorance'; but it can also mean 'grows great.' There is a

difference in the pointing, but no question of the meanings; see Ps. xviii. 18.

3. In New-Hebrew **מצערה** can mean 'producing the torture'; we shall find some grounds in the fourth section for believing that this very word was used in this verse; but it can also mean 'slight,' 'trivial.' Here again there is no doubt of either meaning. The verse then as restored and interpreted will give the meaning, *For an expectation (of evil), though originally slight, grows great from a trifling cause.* Heb. **כי . . . מלפנים . . . תשנה שניאה מעלה מצערה**.

Let us now see whether this suits the context: in v. 11 the author says 'wickedness when self-condemned is cowardly, and, bound by conscience, *constantly increases its hardships.* For fear is nothing but the giving way of the auxiliary forces of the reason.' 'For,' our verse will add, 'a suspicion originally slight is made great by a slight cause,' *i.e.* any slight indicium will when our suspicions are once aroused augment them to horror.

8. xii. 24. *θεοὺς ὑπολαμβάνοντες τὰ καὶ ἐν ζῴοις τῶν ἐχθρῶν ἄτιμα.*

Thinking to be gods the dishonourable among the beasts of the enemies.

What are the beasts of the enemies? As no answer can be given to this question, Mr. Deane renders 'which were despised by their enemies,' making the author employ, I believe, a very doubtful construction; for *ἄταις ἔρσενος γόνου*, etc., are surely rather different. *ἐχθρός* in the Greek of Ben-Sira regularly corresponds with **שנא** in the Syriac. Now **חיות השנאים** might mean 'beasts of the enemies,' but it might also mean 'wild beasts,' from **השנאים**; for that this was New-Hebrew as well as Syriac is shown by Ecclus. xxxix. 30, *θηρίων ὀδόντες*, Syr. 'wild beasts.' The translator of Ben-Sira as a rule observes the order of the words very carefully, and hence the order here would have told us the truth, even if the independent evidence of the Syriac had not given it. The translator (*ex hypothesi*) of Wisdom is far less scrupulous.

9. vi. 2. ἐνωτίσασθε οἱ κρατοῦντες πλῆθους καὶ γεγαυρωμένοι ἐπ' ὄχλοις ἐθνῶν.

Hear ye who rule the multitude and glory in crowds of nations.

As in verse 1 the synonyms for 'ruler' are all simple 'kings,' 'judges,' γεγαυρωμένοι seems out of place. In Chaldee מְרַבֵּינִי means both 'glorying in,' and also 'ruling over,' which is the conception that we require.

10. vi. 15. ὁ ὀρθρίσας ἐπ' αὐτὴν οὐ κοπιᾷσει· παρέδρον γὰρ εὐρήσει τῶν πυλῶν αὐτοῦ.

He that goeth early after her shall not toil; for he shall find her seated at his gate.

It is well known that the translation ὀρθρίζειν for שָׁחַ 'to seek,' is occasioned by a wrong connexion of the word with שָׁחַ 'the dawn'; just as the Latin *erigilare* may be due to a connexion of it with שָׁחַ 'sleeplessness.' This might be a Hebraism, if the mention of the dawn were here appropriate; but clearly it is not so, mere *seeking* being alluded to.

11. xvi. 21. ἡ μὲν γὰρ ὑπόστασις σου τὴν σὴν πρὸς τέκνα γλυκύτητα ἐνεφάνιζε.

For thy sustenance declared thy sweetness unto thy children.

ὑπόστασις stands very clearly for the New-Hebrew טַעַם, 'food,' or טֶבֶל; that this latter word is used both in the sense of 'column,' 'pedestal,' and of 'bread,' is well known. This however might be a Hebraism: but what is 'thy sweetness to thy children'? In Exodus xvi. 31 we learn that the manna, here alluded to, was both *sweet* and *white*, לֶבֶן; such a phrase as מִמֶּתְקִים לִבְנֵים might mean 'sweetness to children,' but also a *sweet white thing*, which I take to be here a more intelligible and appropriate expression.

12. xv. 19. οὐδ' ὅσον ἐπιποθῆσαι ὡς ἐν ξῶαν ὄφει καλὰ ὄντα τυχεῖναι. ὡς ἐν ὄφει=Heb. כָּנַג; the illustrations of this phrase in Gesen. show that it means no more than 'as.' ἐπιποθῆσαι for לַחֲמֹד is of course another Hebraism.

If the evidence that has been adduced in this section seem striking, that in the next will render it more so; but if the

reader attribute all this to chance, perhaps the facts marshalled in the next section will render that explanation improbable.

§ 3. *Evidence of the Syriac (Peschitto) Versions.*

That the Peschitto version of Wisdom is not independent of the Greek is too clear to need demonstration. Mr. Deane regards it as useless for the criticism of the text, owing to its periphrastic character. I believe that the accusation of looseness brought sometimes against these Syriac versions can rarely be proved; and I fancy that a part at least of the variants of the Peschitto of Wisdom may be explained by the hypothesis that it was made or corrected from a Hebrew copy.

1. ii. 12. ἐπιφθάλξει ἡμῖν ἀμαρτήματα παιδείας ἡμῶν.

And he upbraids us with the transgressions of our education.

Syriac 'with the transgressions of our *rebelliousness*' (ܡܪܚܘܬ). The phrase is a Semitic one in any case, meaning 'our transgressions against discipline,' or 'our rebellious transgressions.' Now it is remarkable that there is a word in New-Hebrew which signifies *both* 'education' and 'rebellion,' viz. מַרְדּוּת. If derived from מָרַד 'to rebel,' this word means *contumacia*; if derived from יָרָה 'to teach,' it means 'discipline.' The word is a real one in both senses, though more common in the latter. For מַרְדּוּת 'contumacy,' see Levy's *Lexicon to the Talmud*; for מַרְדּוּת 'education,' see e.g. *Midrash Rabba* on Exodus, ad init. מוֹנֵעַ בְּנוֹ מִן הַמַּרְדּוּת.

2. xi. 15. οὐχ ὅμοια δικαίοις διψήσαντες.

Not thirsting like the just.

Syr. 'and *their cry* was not like their thoughts' (ܓܥܬܪܝܢ). In New-Hebrew צוֹחֵם from צָחַח (pres. part. plur. masc.), means *thirsting*; and צוֹחֵם from צוּחַ (substantive with 3rd masc. plur. suffix) might mean *their cry*.

3. xvi. 10. οὐδὲ ἰσβάλων δρακόντων ἐνίκησαν ὀδόντες.

Not the very teeth of venom-casting dragons overcame.

Syr. 'the teeth of dragons and they were riding over their

heads.' In Hebrew ראש means *head*, and also means *venom*. In Chaldees שדא means *to cast*, and שרא *to sit upon*.

4. xv. 16. καὶ τὸ πνεῦμα δεδάνεισμένος ἐπλασεν αὐτούς.

And one who has borrowed his breath formed them.

Syr. 'And a spirit of fraud (נפא) formed them.' In New-Hebrew נָפַח, passive participle of נָפַח, means *borrowed*, and נָפִי substantive means *fraud*.

5. xvii. 9. ἐκσεσοβημένοι διώλλυντο.

They perished, scared.

Syr. 'they fell from birds.' In New-Hebrew מִפְּרָחִים, passive participle of Huf'al of פָּרַח, means *scared*; and the same word (pres. part. Kal + מֵן) means *from birds*.

6, 7. xiv. 16. εἶτα ἐν χρόνῳ κρατυθὲν τὸ ἀσεβὲς ἔθος ὡς νόμος ἐφυλάχθη.

Then in time the ungodly custom grown strong was kept as law.

Syr. 'ungodliness circulated and grew strong for a time; and teaching kept it like law.'

In New-Hebrew הָרַר (particle) means *then, afterwards*; and הָרַר (verb) means *circulated*. In New-Hebrew רִגְלוֹת means *custom*; but the corresponding verb רִגַּל means both *to accustom* and *to teach*; and hence רִגְלוֹת in Eccus. xxiii. 14, rightly rendered by the Greek translator ἔθισμός, is rendered by the Syrian *teaching*. That רִגְלוֹת was the word there used is shown by the gloss ψεύσματος found in many MSS. of Eccus. iv. 25 περὶ τῆς ἀπαιδευσίας σου ἐντραπήθητι; for obscene language is not a *lie*, רִגְלוֹת, but is a *habit*, רִגְלוֹת. This observation will also explain the rendering of ἐμμελέτημα ('practice') by יִלְפָנָה 'doctrine' in Sap. xiii. 10.

8. viii. 8. καὶ ὁ πάντων δεσπότης ἠγάπησεν αὐτήν:

And the Lord of all loves her.

Syr. 'Because God is *her father*, and the Lord of all *loves her*.' This would seem to be a double version, after two readings, אֲבִיהָ and אֲרַבָּהָ. Of these the former is more likely to be right.

9. xvii. 15. τὰ δὲ τῆς ψυχῆς παρελύοντο προδοσίᾳ:
And partly they were paralysed by treachery of the soul.

Syr. 'And thou didst seem to be bound when thou wast not in chains.' In Syriac מִסִּירוֹת means *treachery, betrayal*, but the form might be New-Hebrew as well. In Hebrew מַסְרוֹת means *chains*.

10, 11. viii. 3. εὐγένειαν δοξάζει συμβίωσιν θεοῦ ἔχουσα:
She glorifieth nobility, dwelling with God.

Syr. 'There is joy and the glory of God in her partnership.' In New-Hebrew חֵרוֹן is *joy*, חֵרוֹת *nobility*. I doubt whether the author, where he is saying he took Wisdom to wife, could use the expression which the Greek gives. Now there are several passages in which the 3rd feminine plural suffix is mistaken for ה', the name of God; so in Ecclus. xxiv. 1b ἐν μέσῳ λαοῦ αὐτῆς, Syr. 'in the midst of the people of God,' Heb. עַמִּיה. In a verse preserved in the Syriac, after Ecclus. i. 22, 'all the praises of the Lord' evidently stands for 'all her praises.' *Glorifieth* and *and glory* only differ in Hebrew by the half of a י.

12. xiv. 7. εὐλόγηται γὰρ ξύλον δι' οὗ γίνεται δικαιοσύνη.
Blessed is the wood whereby righteousness comes.

Syr. 'Blessed is that wood wherefrom a just man appeared' (רודיקא מנה מתחוא). In Hebrew שָׁבוּ הָיָה צֶדֶק could mean 'wherein a just man was,' or 'whereby justice came about.' It is evident that the first of these renderings will get rid of all the difficulties which have been found in this verse.

13. xvii. 16. ἡ τῶν κατ' ἐρημίαν ἐργάτης μόχθων:
Or a labourer of the toils of the desert.

Syr. 'or labouring at the work of the field.' In New-Hebrew דֶּבֶר means *field*, and also *desert*. See examples of both in Buxtorf; the same usages are found in Syriac. It would be natural to suppose that work would be found in the *fields* more easily than in the *desert*. The Vet. Lat. here supports the Syriac.

14. iv. 16. κατακρινεῖ δὲ δίκαιος καμὸν τοὺς ζῶντας ἀσεβεῖς.

And the just man dead shall judge the sinners who are quick, καὶ νεότης τελεσθεῖσα ταχέως πολυετὲς γῆρας ἀδίκου and youth accomplished quickly the many years of old age of the wicked.

Syr. 'He shall judge the righteous and destroy (מוכר) the wicked while alive; and youths who go out to a short time זעירא זמן זמן נפין לזבנא זעירא more than the long time of old men of falsehood.' נערים in Hebrew according to the pointing can mean either *youth*, νεότης, or *youths*. משתזין means in Chaldee *consumed*, *completed*, and is once rendered by τελεῖσθαι; derived from צא it might be rendered *going out*.

The mistranslation of the first sentence could be more easily accounted for from the Hebrew than from the Greek:

ידן צדיק המת לרשעים חיים

ידן could mean *the dead*; but it could also (with a different pointing) mean *he shall destroy*.

Some of the remaining mistranslations of the second clause could also be plausibly explained. זקני שוא might mean *the old age of wickedness* or *old men of falsehood*.

This does not exhaust the examples at our disposal; but if our hypothesis is not sufficiently supported by the examples given, double the number will not help it. It still remains a difficult question whether the Syriac version was made from the Hebrew and corrected from the Greek, or made from the Greek and corrected from the Hebrew. On the whole, the former hypothesis seems the more probable; and if we can imagine that the original translator had copies of both, but was rather more skilled in Greek than in New-Hebrew, the curiously mixed text which the Peschitto presents will be partially accounted for.

§ 4. Evidence of the Vetus Latina.

The Vetus Latina of Wisdom is written in a far more classical dialect than that of Ecclesiasticus; it resembles that version however 1) in showing some independent traces of

a better text than the Greek; 2) in agreeing with the Peschitto now and then in a way which cannot be the result of chance.

I. *Independent readings of consequence in the Vetus Latina.*

1. xii. 22. ἐν μυριάδι μαστιγοῖς.

Thou dost scourge our enemies 10000 fold.

Lat. *multipliciter mastigas*. *Multipliciter* is perhaps a mistaken rendering of ברבו or ברבות.

2. iv. 15. μηδὲ θέντες ἐν διανοίᾳ τὸ τοιοῦτο.

Lat. *nec ponentes in praecordiis talia*.

This would be a literal rendering of the *Hebrew* idiom שמים על לב. Of course *praecordiis* is neither a Latin nor a Greek idiom. The Coptic ⲉⲛⲓⲛⲉⲩⲧⲏⲩ supports this.

3. viii. 11. καὶ ἐν ὄψει δυναστῶν θαυμασθήσομαι.

And I shall be admired in the presence of princes.

Lat. a) *et in conspectu potentium admirabilis ero* b) *et facies principum admirabuntur me*. 'Before' in Hebrew is אֶת פְּנֵי; the passive voice in Chaldee and New-Hebrew is frequently represented as in Coptic by the impersonal third plural; the New-Hebrew . . . וְאֶת פְּנֵי שְׁלִיטִים might be rendered therefore according to either a or b; for אֶת is sometimes used to introduce the subject.

4. καὶ ἐς παραβολὴν ὀνειδισμοῦ.

Lat. *in simili'udinem improperii*. *Similitudo* would seem to represent the Hebrew מִשְׁלָּה rather than the Greek παραβολή.

5. xi. 6. αἵματι λυθρώδει ταραχθέντος.

Lat. *humanum sanguinem*. For λυθρώδει we should restore from the Coptic and Armenian versions ἐρυθρῶ *red*. ἐρυθρὸν αἷμα may stand for Heb. דָּם אָדָם, which could mean either *red gore* or *human gore*.

6. xiii. 4. εὐκίνητον φυτὸν ἐκπρίσας.

Lat. *lignum rectum secuerit*.

The Armenian version for εὐκίνητον has *geletsik* 'fair'; and this is recommended by the Hebrew phrase עֵץ נָאִה, e.g. in Midrash R. Exodus § 15, מִשָּׁל לְעֵץ נָאִה שְׂמָה בְּמִרְחֵץ; a good piece of wood which was in the bath house and afterwards made into the king's image. The Greek εὐκίνητον, ingeniously rendered by the S.H. 'adaptable,' 'versatile,' comes perhaps from a false connection with נָע.

II. Agreement of the *Vetus Latina* with the *Syriac* version.

This observation is of course only rendered of consequence by those in the preceding section. The agreement of these ancient authorities against the Greek will probably be decisive in favour of a particular reading. For, as there is little trace of collusion, the reading in question must come from an independent source.

a. Agreement in the treatment of certain words.

κατασκευάζω.

vii. 27. προφήτας κατασκευάζει *constituit* מתקנא.

ix. 2. κατασκεύασας *constituisti* תקנת.

xi. 24. κατασκεύασας *constituisti aut fecisti* עבד הוית.

xiii. 4. ὁ κατασκεύασας αὐτά *qui haec fecit* רעבד.

xiii. 11. κατασκεύασε *fabricet* הקנה.

xiv. 2. κατασκεύασε *fabricavit* עבד.

From xi. 24 it appears that either the word in question had two glosses *constituit* and *fecit*, or that two words (probably תקן, to which *constituit* exactly corresponds, and עבד) were used in the original. It will at any rate be allowed that the versions are not here unconnected.

παιδεύειν, βασανίζειν, κολάζειν.

iii. 5. ὀλίγα παιδευθέντες *in paucis ceceati* קליל בקא אנין.

Elsewhere παιδευθέντες is represented by *disciplinam acci-*

pientes. The Hebrew מִסְרִים in the Rabbinic language signifies 'being afflicted.' This the translator may have known.

- xi. 5. ἐκολάσθησαν *poenas passi sunt* אתנקמו.
 xi. 13. κολάσεων *tormenta* פורענא, read פורענא.
 xii. 27. κολαζόμενοι *cum exterminarentur* נתנקמו.
 xiv. 10. κολασθήσεται *tormenta patietur* נתח'בון.
 xvi. 1. ἐκολάσθησαν *passi sunt tormenta* אתנקם.
 xvi. 9. κολασθῆναι *exterminari* נתנקם מנהון.
 xvi. 24. εἰς κόλασιν *in tormentum* פורענא.
 xviii. 11. κολασθεῖς *afflictus* פורענא.
 xviii. 22. τὸν κολάζοντα *illum qui se vexabat* מתבלנא.
 xix. 4. κόλασιν *punitio* תשניקא.

We have seen from the Midrash Tanchuma that the Heb. for κολάζειν was perhaps נפרע, and for κόλασις פורענות. This explains the Syriac rendering by נקם, which is almost an equivalent of פרע, but not the Latin rendering by *tormenta*.

For βασανίζειν, βάσανος the Syriac has regularly נגד, except in xvii. 13 נעצא and xi. 9 (ἐβασανίζοντο), where it offers מצטרין ומצטרין. Read instead of the latter מצטרין. It is not improbable that in these two places the original word has been preserved, for the difference between the Chaldee use of נעצא for *bodily pain* and the Syriac use for *insult, dishonour*, is well known.

b. Agreement in the rendering of particular passages.

1. iv. 1. μετ' ἀρετῆς: *cum gloria* S.L.
2. ix. 10. δόξης: *magnitudinis* S.L.; New-Hebrew רבות?
3. xii. 1. ἀφθαρτον: *bonus et suavis* L.; *bonus* S.
4. xiii. 5. ἀναλόγως: *cognoscibiliter* L.; *aperte* S.
5. xiii. 19. τὸ ἀδρανέστατον ταῖς χερσὶν εὐδράνειαν αἰτεῖται: *petit ab eo qui in omnibus est inutilis* S.L.

6. xv. 7. τὰ τε τῶν καθαρῶν ἔργων δοῦλα σκεύη τὰ τε ἐναντία: *quae munda sunt in usum casa, etc.* L.; *casa munda ad ministrationem et casa non munda ad opera sua* S.; compare Arm. *whether vessels for the uses of purities or for works or the opposite, etc.* (The Armenian is rather difficult: *kam the*

arbourtheants inch spazavorouthean anōths kam thē gorzoyits, kam thē, etc.). The similarity between Lat. and Syr. is surely very striking; and the Greek δούλα would appear to be a mere mistranslation of עבדים, which of course can mean either *works* or *slaves*.

7. xiv. 19. τῷ κρατοῦντι βουλόμενος ἄρῃσαι: רַחֵן נִיר רֵאחִיד; *illi qui se assumpsit*. רֵאחִיד in Syriac (and, perhaps, New-Hebrew) can mean *one who rules* and *one who has taken*. The Latin rendering can only be accounted for as a rendering of either the Syriac or the original.

8. Compare the treatment of χωρεῖν in vii. 23 διὰ πάντων χωροῦν πνευμάτων; לכל רוחא אחידא Syr.; *qui capiat omnes spiritus* Lat. (compare Arm. 'sufficient for all things,' v. infra). Certainly χωρεῖν in Greek can mean *to hold* and *to permeate*. But to give it the former meaning in this place would be to attribute to the Latin translator a solecism of which he would scarcely have been guilty. If the Greek rendering is right—which is possible—it will be better to assume that רֵאחִיד and רֵאחִיד were various readings in the original.

9. xiii. 19. καὶ ἀγαθῶν καὶ κινδύνων μεταλίσψεσθαι: *et bona et mala recepturos* L.S.

This list again does not exhaust the parallels between the two versions; yet the enumeration in § 1 makes it improbable that the Latin has here been influenced by the Syriac.

§ 5.

The various readings of the Book of Wisdom are decidedly less interesting than those of Ecclesiasticus, nearly all of which (leaving out itacisms) contribute something to our acquaintance with the original. Of course this fact does not militate against our theory, being sufficiently accounted for by the supposition that the original perished early. Moreover, we shall find among these various readings a spicilegium which makes in our favour. Besides, not all the MSS. have been collated, and the collations of the versions given by Fritzsche are imperfect and careless. Of three versions no collations have yet been published—the Syro-Hexaplaris,

Sahidic (published by Lagarde in his *Aegyptiaca*) and Aethiopic (existing in MS.); and the collation of the Armenian is so imperfect and inadequate as to be worthless. We shall in this section briefly notice the readings of MS. 248 (so important in Ben-Sira), and then of the Armenian version. The Coptic version is of great importance, but does not contain much that is fresh; the Aethiopic is paraphrastic and untrustworthy.

I. *Readings of MSS.*

These varieties seem to exhibit the liberties that might be taken with a translation, compared with its original, not with an original document.

i. 5. παιδείας: σοφίας 248.

ibid. ἀδικίας: ἀνομίας 248.

ii. 12. ἁμαρτήματα νόμον: παραπτώματα νόμου 248.

If the Heb. was עברות, this would be a better rendering; and that this is the right rendering is shown by the fact that ἁμαρτήματα is employed in the next clause—a tautology which the writer would not have allowed himself, had it also occurred in the first. Moreover ἁμαρτήματα νόμον is not a legitimate expression; nor is ἁμαρτήματα παιδείας, but then as we have seen παιδεία stands for צדקות, which meant 'contumacy.'

ii. 23. καὶ εἰκόνα τῆς ἰδίας ἰδιότητος ἐποίησεν αὐτόν: ἀιδιότητος 248 and S.H. Further emend κατ' for καὶ from Copt. Clearly the sense requires this reading.

iii. 10. ἔξουσιν ἐπιτιμίαν: ἀτιμίαν 248 and Syr.

iv. 2. παρούσαν τε μιμούνται αὐτήν: τιμώσω 248.

This must be right; for how can one imitate childless men with virtue? Compare inf. xiv. 15 ὡς θεὸν ἐτίμησεν, Syr. עברה פחמה דאלהא. Perhaps the confusion may be accounted for by supposing ישברהו read ישבחהו and interpreted from the Arabic.

v. 10. οὐδὲ ἀτραπὸν τρόπιος: πορείας 248. (From the last clause.)

vii. 9. λίθον ἀτίμητον: τίμιον 248. Heb. אֲבֵן יָקָר better so rendered.

vii. 19. ἀστέρων θέσεις: δρόμους 248.

ix. 9. ἐν ὀφθαλμοῖς σου: 248 ἐνώπιόν σου. Heb. בְּעֵינַי.

x. 17. ἀπέδωκεν ὅσίοις μισθὸν κόπων αὐτῶν: μισθὸν ὁσίωντος 248. The rendering of מַעֲשֵׂה?

xv. 5. εἰς ὄνειδος: ὄρεξιν 248.

A few more varieties of interest could be brought from the other MSS. (some of which agree with 248 in the above readings).

II. Varieties of the Armenian version.

As has been said above, this version is very inadequately represented in the published collations. Prof. de Lagarde calls in question the good faith of the editors; however, it is not probable that they have allowed themselves any serious licences in Wisdom. The Queen of the versions is so scrupulously accurate, in spite of its limpid eloquence, that we can argue with certainty to the text which it represents.

1. *Passages which preserve a trace of the original lost in the other sources.*—If there be any of these, we shall not suppose that the Armenian translator got them independently, but rather that his Greek copy had been revised. Such cases are the following:

1. iv. 15. ὅτι χάρις καὶ ἔλεος ἐν τοῖς ἐκλεκτοῖς αὐτοῦ.
Arm. 'that the justice of God is upon his saints.'

The variation 'saints' is found in some MSS., but not 'justice,' *iravounkh*, used only in this sense in Armenian. Syr. 'wherefore thus is the judgment, and the grace and the mercy of God upon his saints.' Now דְּרָקָה stands in Heb. for the two conceptions of δικαιοσύνη and ἐλεημοσύνη (see especially Hatch's 'Studies in Biblical Greek,' second essay). Probably however the original here should have been יְדִרְתָּהּ.

2. vi. 19. ἀγάπη δὲ τήρησις νόμων αὐτῆς.

Arm. 'and the keeping of her laws is mercy,' *gouth*.

We have already seen that in New-Hebrew the root רָחַם

has both senses 'to love' and 'to pity,' and the noun רחמנות can mean either. Assuredly *mercy* makes better sense here than 'love,' as the reader may convince himself by studying the context.

3. ii. 24. πειράζουσι δὲ αὐτὸν οἱ τῆς ἐκείνου μερίδος ὄντες.

Arm. 'and those try him who are of the number of his lot,' *nora vidgakin saki en*. It would seem possible that 'number' and 'lot' represent two renderings of the Heb. מנח.

4. vii. 23. καὶ διὰ πάντων χωροῦν πνευμάτων.

Arm. 'and sufficient for all things,' *irats*.

We have already seen that Syr. and Lat. so represent χωροῦν; the Arm. then adds a new reading, πραγμάτων for πνευμάτων, which has much to recommend it.

5. ix. 10. ἀπὸ θρόνου δόξης σου πέμψον αὐτήν ἵνα συμπαροῦσά μοι κοιτάσῃ.

Arm. 'that she may come and abide with me,' *dudarestæ*.

It seems clear that this makes better sense than the Greek. If the Hebrew was תעמל, the Arm. would give us a possible emendation תעמר 'dwell.'

2. *The Armenian renderings in a few places seem to preserve Hebrew idioms lost in the Greek.*

ix. 8. ἐν ὄρει ἁγίῳ σου: Arm. 'mountain of thy holiness,' Aeth. similarly, Heb. רר קדשך (contrast clause 3 *ibid.*).

iv. 18. εἰς πτώμα αἰτιμόν: Arm. 'a ruin of dishonour,' Syr. similarly.

vii. 19. ἐν ὄψει αὐτῆς: Arm. 'compared with it,' Heb. כננר. xi. 14. πάλαι: Arm. 'yesterday and the day before

yesterday,' Heb. כחמל ששם. xv. 24. ἕτερος δὲ ἕτερον: Arm. 'a man his neighbour,' Heb. איש רעהו. (Yet these may be Armenian idioms.)

3. *The Armenian version agrees remarkably with the Peschitto in the rendering of certain words and phrases.*

κίβδηλος: ii. 16. εἰς κίβδηλον: Syr. and Arm. 'like foul-

ness.' xv. 9. *κίβδηλα πλάσσει*: Syr. and Arm. 'unclean-ness.'

ἐχθιστα, xii. 4 and xv. 18. Syr. and Arm. 'foul.' It can be shown that in Ben-Sira *βδελυκτός* represents *נ'נ'ש'*, which means both *hateful* and *foul*. This was probably the word used here. Compare Syr. and Arm. of xiv. 11, where the same words are employed for *βδέλυγμα*.

viii. 12 *καὶ φθεγγομένοι προσέξουσιν*: Syr. 'they shall gaze,' Arm. 'they shall gaze attentively.'

viii. 4. *μύστις γὰρ ἐστι*: Syr. and Arm. 'she is a secret-sharer.'

v. 11. *μαστιζόμενον*: Arm. 'tearing,' Syr. similarly, but with other renderings.

xiv. 30. *τὰ δίκαια*: Arm. and Syr. *δικαίως*.

xvi. 1. *κνώδαλα*: Arm. and Syr. 'worms.' So too Arm. in xi. 15, but not Syr.

xiii. 12. *ἀποβλήματα*: Arm. and Syr. 'the planings,' which assuredly is right.

xv. 6. *κακῶν ἐρασταί*: Arm. and Syr. 'artificers of evil,' possibly *δρασταί*.

xvii. 3. *ἠδάλμασιν ἐκταρασσόμενοι*: Arm. 'alarmed and disturbed.' Syr. similarly.

xviii. 23. *καὶ διέσχισε τὴν πρὸς τοὺς ζῶντας ὁδόν*: Arm. and Syr. 'and cut a path between the living and the dead.'

The argument to be derived from these passages is not very considerable. However the fact that a considerable number of the variants of the Peschitto (which is moreover very corrupt) can be traced to a Greek MS. which formed the basis of the Armenian version, confirms the theory that there existed in early times some very different recension of the book. Whether the Peschitto was originally made from one of the Greek recensions or from the original we cannot decide.

4. One case of striking agreement with the Latin version is worth pointing out.

iv. 19. *ῥήξει αὐτοὺς ἀφώνους πρηνεῖς*: for *πρηνεῖς inflatos*, Arm. and Lat.

5. Although it does not come into our task to emend the Greek text from the Armenian, yet there are so many striking readings in the latter that it will be doing some service to point some of them out.

ii. 18. εἰ γάρ ἐστιν ὁ δίκαιος υἱὸς Θεοῦ: Arm. δικάϊως: 'if he be genuinely the Son of God,' assuredly a good emendation, whether it be true or not. δικάϊως is the true Attic idiom in this case. So Sophocles in 'Aiace' εἴπερ δικάϊως ἔστ' ἐμὸς τὰ πατρόθεν; Demosthenes in 'Boeoto de nomine,' etc.

iii. 1. οὐ μὴ ἄφηται αὐτῶν βάσανος: Arm. θάνατος, which suits the context better. Compare Copt. βάσανος θανάτου.

iv. 5. οὐκ ἔστιν ἀναποδισμός: the Arm. reads ἐμποδισμός 'hindrance,' previously conjectured from the Arabic version.

v. 16. λήφονται τὸ βασιλεῖον τῆς εὐπρεπείας: Arm. τοῦ βασιλείου τὴν εὐπρέπειαν: Copt. τὴν εὐπρέπειαν τοῦ βασιλείου. The Hebrew was probably כְּרוֹן כְּרֹן 'a royal crown,' which follows τὸ διάδημα τοῦ κάλλους standing for כְּרֹן כְּרֹן.

vi. 24. οὔτε μὴν φθόνῳ τετηκάτι συνοδεύσω: Arm. τετηκώς. Syr. omits the word, probably rightly.

vii. 25. ἀτμὶς γάρ ἐστι τῆς τοῦ Θεοῦ δυνάμεως: Arm. ἀκτίς 'she is a ray of the Divine power.' Aethiop. similarly.

viii. 4. καὶ αἰρετὶς τῶν ἔργων αὐτοῦ: Arm. and S.H. ἐραστὶς, which like all the other readings must be wrong.

xiii. 3. πρυτάνεις κόσμου: Arm. 'satellites of the world.'

xiv. 21. συμφορᾷ ἢ τυραννίδι: Arm. and Copt. συμφορᾷ τυραννικῇ.

xiv. 29. κακῶς ὁμόσαντες ἀδικηθῆναι οὐ προσδέχονται, 'They do not expect to be harmed;' if this is the meaning, ἀδικηθῆναι is not quite a suitable word. ἐκδικηθῆναι 'to be punished' of Arm. and Syr. is better.

xv. 7. ἀπαλὴν γῆν θλίβων ἐπίμοχθον: Arm. 'squeezing soft clay upon the wheel,' ἐπὶ τροχόν.

§ 6.

Having, as we fancy, laid the thesis that the Book of Wisdom was written in New-Hebrew on a securer basis, it is

time for us to examine the arguments, hitherto regarded as conclusive, by which the book has been shown to have been written in Greek. These arguments have been drawn 1) from the language, 2) from the references, 3) from the thought.

i. It is before all things necessary to distinguish in the first argument between what is relevant and what is irrelevant. A case like the play on *διαθήκη* in the Epistle to the Hebrews is irrefragable evidence of the Greek origin of that work; but Grimm's argument from the Paronomasias, Homoeoptota and Assonances (of which he should have collected more illustrations) need prove no more than that the book was carefully rendered. Most excellences of English style could be illustrated from the Master of Balliol's Plato; but yet it is a translation. Now so far is the style of Wisdom from being excellent that it is atrocious; the periods are Hebrew, not Greek; and it is full of Hebraisms, which of course can only be rarely found in original Alexandrian writers such as Philo.

Not to speak without proof, we will here collect a few of these Hebraisms.

i. 4. *σώματι καταχρέω ἁμαρτίας*: Rabbinic Hebrew חַיִּב הַטָּאָה. So Midrash Tanchuma (Warsaw, 1879) i. 22b אַם יֵצֵאָה בָּהֶן חַיִּיבֵת חַטָּאָה, and often. Hence Copt. renders by 'sinful' only.

i. 7. *τὸ συνέχον τὰ πάντα*, referring to *God*, not to Wisdom: Syriac אֲחִיד הַכֹּל 'the omnipotent,' rendering of Heb. שֶׁרִי. The Aethiopic Church adopts the same phrase.

ii. 6. *χρησώμεθα τῇ κτίσει*: New-Hebrew הַבְרִיִּית = 'the world.'

iv. 10. *ἀλλάξῃ σύνεσιν αὐτοῦ*: Hebrew and Syriac נִשְׁנָא טַעְמָה, meaning *to madden*.

v. 3. *στενοχωρίαν πνεύματος*: Heb. צַר רוּחַ.

v. 16. *τὸ διάδημα τοῦ κάλλους*: Heb. עֲטֻרַת צִי.

vii. 1. *γηγενούς πρωτοπλάστου*: New-Heb. אֲדָם הָרִאשֹׁן.

vii. 17. *σύστασιν κόσμου*: New-Heb. תַּקֵּן עוֹלָם.

x. 15. *ἐξ ἔθρους θλιβόντων*: play on מַצְרִים and צָרִים?

xiv. 2. τὸ ἀκοινώνητον ὄνομα: New-Heb. שֵׁם הַמְּפֹרָשׁ, applied to the name of God. This mention of it is very noticeable, because it shows that in the days of the pseudo-Solomon it meant any name of God, not the tetragrammaton in particular. (Noticed by Dr. Farrar.)

xiv. 6. ἡ ἐλπίς τοῦ κόσμου סברו של עולם in Midrash Tanchuma i. 50a (זה יוסף סברו של עולם שהיה במצרים).

iii. 15. ἀγαθοὶ πόνοι: New-Hebrew מעשים טובים.

This passage, ἀγαθὴν γὰρ πόνων καρπὸς ευκλείης, with v. 13, ἔξει καρπὸν ἐν ἐπισκοπῇ ψυχῶν, is well illustrated by a passage in the same Midrash i. 11a, 'In the hour when a man is taken from the world without children he is in trouble and laments. God says to him: Why weepest thou? Because thou hast not established fruit העמרת פרי in this world, there is a fruit for thee that is fairer than children. . . . Thus the generations of a man are *good works*.'

The above are of course merely a spicilegium; Bretschneider collected a number of more familiar ones. When Griim observes that the Hebrew language had no equivalents for many of the philosophical expressions used by the pseudo-Solomon, it is difficult to know to which he refers. ἀμορφος ὅλη need for example be no more than a rendering of תהו ובהו. Some of the compounds have already been dissolved by the previous processes; for example, ἰοβόλων was shown by the Syriac version to stand perhaps for שדי ראש. When he further states that the description in C. ii. 1-6 could not be represented in Hebrew, he surely underrates the wealth of the New-Hebrew vocabulary, which has been shown elsewhere to contain equivalents for philosophical terms.

There are besides traces which show that the translator has introduced philosophical terms where the author did not employ them. Such a term is ἀθανασία 'immortality,' which is very frequent. Now it is remarkable that although the Coptic language possesses an exact equivalent for this concept ⲙⲓⲧⲁⲧⲉⲙⲟⲩ (compare ⲁⲧⲉⲙⲟⲩ for ἀθάνατος in l. 15), the Coptic translator everywhere represents ἀθανασία by

ωπζ, 'life.' It can be no accident that the Peschitto translation has the same rendering in the majority of cases. Now if we remember that in Ecclus. xix. 7 the phrase *ἀθανασία* occurs, and that that phrase must necessarily stand for the Hebrew עֵץ הַיִּם, it is natural to conjecture that *ἀθανασία* represents חַיִּים here, and that the copies used by the Coptic and Syriac translators had been corrected from the original. In vii. 17, etc., occur a number of philosophical terms together, several of which are liable on external evidence to suspicion. In the combination *ἐνέργειαν στοιχείων*, *ἐνέργεια* means no more than 'force,' but for *στοιχείων* the Aethiopic translator (Bodleian MS.) has 'sun, moon and stars,' a rendering which corresponds very curiously with the Peschitto מַחְלָתָא 'constellations.' The Hebrew is therefore likely to have been מוֹלֶוֹת. For *τροπῶν ἀλλαγὰς* in vii. 18 the Coptic has 'changes of *airs*,' the Pesch. 'changes of *things*,' צְבוֹתָא; this makes it likely that no very scientific phraseology was used by the author. It has been suggested above that *γῆγενής πρωτόπλαστος* represents אִדָּם הָרִאשׁוֹן; and it is probable that *τὸν σοφίᾳ συνοικούντα* (vii. 28) means no more than בַּעַל הַכֶּמֶה; the verb *βασίλειον* meant *συνοικεῖν*, and the translator may have had phrases from the Attic tragedians in his mind. In ix. 5 *ἀλεγχοχρόνιος* is a very natural rendering of קֶצֶר יָמִים. The highly philosophical term *ὑπόστασις* we saw above to be a very unsatisfactory translation of the Rabbinical מַעֲדָה 'food.' In xv. 17 *σέβασμα* for 'object of worship' is a high-sounding phrase; but it exactly corresponds to יְרֵאָה, which the Rabbis use quite in this way (Psikta ed. Buber, p. 65b). *καταδυναστεύειν* (xv. 14) is a sesquipedale verbum, but has an exact equivalent in the Rabbinic שַׁעֲבַד. The ease with which these equivalents can be found seems a very suspicious circumstance; and the peculiarities of the language of Wisdom can be sufficiently accounted for by supposing that the translator had some acquaintance with the technicalities of Greek philosophy, and thought that long compounds were an essential ingredient in an eloquent style. That the periods are Hebrew

and not Greek periods is, as has been before observed, generally agreed.

A word should be said about the paronomasias which, according to Grimm, occur in great numbers in the Greek of this book. Some of these are collected by Dr. Farrar in the Speaker's Commentary, i. p. 406. Of these ποταμοί—ἀποτόμως in v. 23 is the most striking. Much importance cannot be attached to them, because a stylist, whether translator or author, might aim at this effect. There is in the Syriac version in vi. 10 (ἵνα μάθητε—παραπέσητε תפלין and תאלפן) as good a paronomasia as occurs anywhere in the Greek, which seems to be due to the translator. Moreover, in some cases the play on words gives a better sense in Hebrew than in the Greek as we have it; in vi. 11 οἱ φυλάξαντες ὁσίως τὰ ὅσια ὁσιωθήσονται is a mere tautology, whereas in Hebrew שְׂמֵרֵי חֲסִידוֹת יִתְחַסְּדוּ might intelligibly mean 'those that practise *righteousness* shall find *mercy*,' the root חסד having two senses which might be played upon. Some verses besides will produce a paronomasia in the Hebrew when quite literally rendered; ii. 22b, c οὐδὲ μισθὸν ἤλπισαν ὁσιότητος οὐδὲ ἔκριναν γέρας ψυχῶν ἀμώμων become verses of Ben-Sira's style, with a paronomasia in the first clause

וְלֹא שִׁבְרוּ שֶׁכֶר חֲסִידוֹת

and perhaps another in the second. It will be fair to let these facts counterbalance each other.

There are however two passages of more consequence for the language-question, which we will briefly discuss:

i. xv. 9. (of the idol-maker) καὶ δόξαν ἡγέεται ὅτι κίβδηλα πλάσσει.

It has been observed above that κίβδηλος, here and in ii. 16, is rendered by the Syrian and Armenian translators by 'unclean'; as κίβδηλος has not that meaning in the Greek, this collusion cannot be accidental; for the Armenian translator is too good a Greek scholar not to know the meaning of so common a word. Can we find a Hebrew word which will mean both *spurious* and *unclean*? Yes, פְּסוּל. Buxtorf's

definitions of the word are *prophanus, illegitimus, impurus, ritiosus*, 'Thus bastards, slaves and the like are called פסולים rejectitii.' So the Chaldee פסולא is employed for *spurious metal*, כספך פסולא. The same word is used of *illegal food*, and as such is regularly used in antithesis to כשר, *lawful*. The passage ii. 16 may therefore be rendered in Hebrew לפסול נחשבנו לו in such a way as to correspond with both the Greek and the Syriac (and Armenian) versions, and with the antithesis ἀκαθαρσιῶν of the following verse. The Arabic Jews, who alter Muhammad's title رسول 'Apostle' to פסול 'spurious,' do what the just man is said to do in this verse. Now if we apply this information to xv. 9 δόξαν ἡγάσται ὅτι κίβδηλα πλάσσει, and restore the verse accordingly לפסל יצר כי ישתבח כי יצר פסל, it obtains a very clear point. פסל may be pointed so as to mean *counterfeit*, but also so as to mean *statue, graven image*; and this meaning it has in Old-Hebrew (Isaiah xl. 19, etc.), whereas the other is confined to New-Hebrew. Assuredly the man's boast is that he makes a *statue*; the word used gives a 'double entendre' *abomination*. It is clear that this paronomasia was only possible in a Hebrew document.

ii. xiv. 22. 'It was not sufficient for them to be in error concerning the knowledge of God; but living in a great war of ignorance they call such evils peace,' ἐν μεγάλῳ ζῶντες ἀγνοίας πολέμῳ τὰ τοσαῦτα κακὰ εἰρήνην προσαγορεύουσιν. This passage must assuredly have had a point, although the commentators do not all help us to find one. In some language the name *peace, par excellence*, must have been applied to religious observances. And this language, I fancy, must be the Greek language, in which εἰρήνη might be conceivably connected with ἱερός, as for example Euripides derives ἀφροσύνη from Ἀφροδίτη. In order to express this clearly the author should have said τὰ τοσαῦτα κακὰ ἱερὰ προσαγορεύουσιν, leaving it to the reader to guess the etymology; or should have added οἷον εἰρηνικά. The way in which he has put the words is such that we cannot argue from it that

the author wrote in Greek, but that he had a sort of acquaintance with some common Greek words.

Derivations from the Greek are to be met with in the Midrash; at the beginning of the Midr. R. on Koheleth we are told that *Jeremiah* (Heb. Yirm'yah) was so called, because in his days Jerusalem became ἐρημία 'a ruin.' It will not be denied that *iepá* is the natural Greek word to describe the mysteries and ceremonies of which the author has just analysed the origin.

I cannot help quoting, before concluding this paragraph, the words of Mr. Deane (Pref. p. 27), which I venture to think rather ill considered. *The book is written in the purest form of Alexandrian Greek, free from the Hebraisms and anomalies of the LXX, and full of passages which combine the richest vocabulary with genuine rhetorical eloquence.* Where then in non-Hebraic Greek are to be found phrases like τί ἀρεστὸν ἐν ὀφθαλμοῖς σου καὶ τί εὐθές (רע) ἐν ἐντολαῖς σου? Are there indeed six consecutive verses in the whole book free from the grossest Hebraisms? However, the learned author of the Commentary on the Book of Wisdom would scarcely be prepared to defend the sentence quoted.

2. A more formidable set of arguments seem to be those drawn from the use of the LXX by the pseudo-Solomon. Grimm (p. 9) speaks of xv. 10 as a 'decisive' case. The passage is σποδὸς ἡ καρδία αὐτοῦ, said to be a reminiscence of Is. xlv. 20, Heb. לֵב אִפְרָיִם, where the LXX renders γνώθι ὅτι σποδὸς ἡ καρδία αὐτοῦ, evidently reading אִפְרָיִם. We cannot conclude from this any more than that in the pseudo-Solomon's time the reading אִפְרָיִם was current in some MSS.—had it not been, the LXX would not have read it;—and that the translator may or may not have used the LXX version. In the other passage ii. 11 ἐνεδρεύσωμεν τὸν δίκαιον ὅτι δύσ-χρηστος ἡμῶν ἐστιν, which is supposed to be a reminiscence of Is. iii. 10, δήσωμεν τὸν δίκαιον ὅτι δύσχρηστος ἡμῶν ἐστιν, where δήσωμεν stands for a false reading אִסְרוּ for אִמְרוּ, if there is any connection, the LXX might rather seem to have copied Wisdom than Wisdom the LXX. For it is to be observed that 1) the *first person* comes naturally and neces-

sarily in the speech in Wisdom; 2) so also does *δύσχορηστος ἡμῶν ἐστίν*; whereas in the LXX both are introduced against the context. If it be further observed that in rendering *כִּי דֹשְׁחֶרֶס* the LXX translator must have been wilfully altering the text, it is quite natural that he should have altered it in accordance with a parallel passage. Of the other cases Grimm himself says that the hypothesis of the translator being familiar with the LXX would be sufficient. There is besides some evidence of independent translation from the Hebrew. xv. 9 *ἀλλ' ἀντερίζεται μὲν χρυσουργοῖς καὶ ἀργυροχόοις* is modelled on Isaiah xli. 7 where the LXX has *ἰσχυσεν ἀνὴρ τέκτων*. The author could never have got *ἀντερίζεται* 'he contests with,' which he further interprets *μιμῆται* 'he imitates,' out of *ἰσχυσεν*; but out of the Hebrew *רִיחִי* it can easily be obtained; the rendering *ἀντερίζομαι* would suit the Hithpa'el form well, and would not disagree with the Hiph'il in late Hebrew (see Gesen. Thesaurus). In v. 14 pseudo-Solomon has *ἄχρη ὑπὸ λαίλαπος*, where the LXX have *φρύγανα* and *καταγίς* (Is. xl. 24).

3. There remains then the argument drawn from the allusions to Greek customs and reminiscences of Greek authors. Of course this need only show that the author was acquainted with Greek, not that he wrote in that language. These allusions have been carefully collected and tabulated in a dissertation by Dr. P. Menzel, whose tables however might be considerably reduced without disadvantage. It would be absurd to deny the value of these studies, or to question the existence of some allusions to Greek philosophy and habits in the Book of Wisdom; I think however it may be shown that the author at any rate had no deep knowledge of either, and that his translator has allowed himself liberties.

In xiii. 4, where the author upbraids the heathen for not arguing from the creature to the creator, we read: *εἰ δὲ δύναμιν καὶ ἐνέργειαν ἐκπλαγύντες νοησάτωσαν ἀπ' αὐτῶν πόσῳ ὁ κατασκευίσας αὐτὰ δυνατώτερός ἐστι*; the two words *δύναμις* and *ἐνέργεια* are here coupled as synonyms, which are elsewhere employed separately with the same meaning (vii.

25 ἀτμίς τῆς τοῦ θεοῦ δυνάμεως καὶ ἔσπτρον τῆς τοῦ θεοῦ ἐνεργείας, vii. 17, 20). Now in a translation from a language which like Hebrew delights in synonyms, it is intelligible that the translator might employ δύναμις καὶ ἐνέργεια to represent e.g. וְכֹחַ וְנֹעַם; but that an original writer of Greek should have coupled words which, when combined, possess such contrary meanings, seems to me astonishing. δύναμις by itself might well mean 'power'; but, when combined with ἐνέργεια, becomes its antithesis, *actuality* as opposed to *reality*. And would not one who was writing independently have felt and avoided this inconvenience?

Secondly, we find in the Book of Wisdom inadequate attempts at rendering Jewish psychological terms. xii. 10 οὐ μὴ ἀλλαγῇ ὁ λογισμὸς αὐτῶν εἰς τὸν αἰῶνα is rendered by Mr. Deane *their way of reasoning will never change*. This is not accurate, for ὁ λογισμὸς stands for דְּרַגְתָּם, their *yetzer* or 'evil inclination'; a word over which the Greek translators stumbled. In Ecclesiasticus we find it rendered διαβούλιον; xviii. 5 διαβούλιον καὶ γλῶσσαν καὶ ὀφθαλμούς should be restored with the help of the Syriac יצר פה לשון ועינים 'he created mouth, tongue and eyes,' where the mistake of the translator tells us with certainty how he rendered דְּרַגְתָּם; by ἐνθύμημα in xxxvii. 3 (where the Syriac gives a certain clue); by βουλή in vi. 1.

In Hebrew נַפְשׁ means 'life' as well as 'soul'; and so in xvi. 9 καὶ οὐχ εὗρέθη ἰαμα τῇ ψυχῇ αὐτῶν 'and no remedy was found for their lives,' σώματι 'body' would have been required by the Greek idiom; one has only to remember how carefully Plato in the 'Gorgias' and the 'Republic' distinguishes between diseases of the body and diseases of the soul to be sure that this observation is a just one. Would an independent Greek writer have been guilty of this confusion? But indeed that the psychology throughout is Hebrew and not Greek need not be proved.

A very suspicious passage is in viii. 7, where we seem to find the Platonic division of the virtues: καὶ εἰ δικαιοσύνην ἀγαπᾷ τις, οἱ πόνοι ταύτης εἰσὶν ἀρεταί· σωφροσύνην γὰρ καὶ

φρόνησιν ἐκδιδάσκει, δικαιοσύνην καὶ ἀνδρείαν. It is to be observed however that here for οἱ πόνοι ταύτης εἰσὶν ἀρεταί the Syriac version has לוֹתָהּ הִיאַ תְּמִיחָא 'she is with her wonderful,' where Faber observed that οἱ πόνοι ταύτης seemed to be a mistranslation of לוֹתָהּ, interpreted as לוֹאִתָּהּ. Eichhorn replied that the corruption might be in the Peschitto, where we should emend לוֹאִתָּהּ. This question can only be decided by critical considerations; and it will be seen that the sentiment 'the virtues are with her' is far more appropriate than the sentiment 'her works are virtues,' which contradicts the almost immediately preceding statement that wisdom works *everything*. It would seem probable that the Syriac is here original and represents a New-Hebrew phrase, meaning, 'with her (wisdom) is the whole of it (righteousness).' In what follows the Syriac omits δικαιοσύνη, it would seem, very properly, unless the author wrote illogically. The passage will lose much of its force for the purpose of argument, if the word ἀρεταί and the fourfold division of the virtues be lost.

Another passage on which much stress has been laid is iv. 2, where 'childlessness with virtue' is said to parade itself in the world, wearing a crown, having conquered in the pure contests, or the contests of purity (στεφανηφοροῦσα πομπεύει, τὸν τῶν ἀμιάτων (ἀνικῆτων Copt., ἀμαράντων Arm.) ἄθλων ἀγῶνα νικήσασα). There is here a reference, it is said, to the Greek custom of giving crowns to the winners in the games. Now there is a passage in the oft-quoted Midrash Tanchuma (ii. p. 107a) which seems to suggest that this is not the reference. 'The works of God are not like the works of a human king. When a human king goes out to war, his legions go out before him; if they conquer, they come and make a crown, and crown him with it.' Moreover in the words *conquers* and *pure* one may see a trace of a play on the two meanings of זִכּוּת in Syriac, *conquest* and *purity*. However this may be, the custom of crowning the victor is alluded to in the Bible.

§ 7.

Having, as we fancy, made it probable that the pseudo-Solomon wrote in New-Hebrew, and that the Greek ideas which the book contains come mainly from the translator, we may now ask whether these observations give us any clue to the time and place of the writer. He is ordinarily supposed to have been a Jew of Alexandria; as the Jews in most parts of the world, where their nationality is of consequence, still write Hebrew, he may well have written Hebrew in Alexandria. Grimm finds evidence of his residence in Egypt in the bitter hate which he evinces towards the Egyptians in the description of the plagues in the last chapters.

Against this it must be observed that the writer shows no acquaintance whatever with Egypt, beyond what he might have got from the Bible. How natural it would have been for one acquainted with that country to have contrasted its singularly luminous atmosphere with the plague of darkness which is so elaborately described; or in describing the plague of rain to have said something of the *rainlessness* of Egypt, which in xvi. 16 is barely, if at all, hinted at. One who knew of the fame of the Egyptian medicine would have drawn a lesson from it in speaking of the plague of ulcers. One who was familiar with the Alexandrian temples would not have had to go to Isaiah to describe the making of an idol. One who had seen the mighty Nile would not have spoken of it as a 'perennial stream' נַחַל אֵיתָן, with which the water from the rock might be compared. On the other hand the writer has probably seen the Pillar of Salt, and knows the neighbourhood of the Dead Sea; for the description x. 7 ἦν ἔτι μαρτύριον τῆς πονηρίας καπνίζομένη καθέστηκεν χέρσος καὶ ἀτελέσιν ὥραις καρποφοροῦντα φυτὰ ἀπιστούσης ψυχῆς μνημεῖον ἑστηκενῆς στήλης ἀλός is meant for that of an eye-witness; for here are details which he could not find in the Bible; and by saying *there still stands* the author is testifying to a fact of his own time. The only place of which the author speaks with any affection is Jerusalem (ix. 8), which he describes in a clearly Hebrew phrase as עִיר שְׁכִינָתָךְ

the city of the Schechina. Clearly then the writer has no liking for a temple at Tell-el-yehudiyya.

What however is of more consequence is that the writer shows a familiarity with the interpretations of the Midrash, which points to the Palestinian school. Some of these coincidences are noticed in the Commentaries, others are not. A passage that has already attracted attention is in the account of the Manna (xvi. 20), *καὶ ἔτοιμον ἄρτον ἀπ' οὐρανοῦ παρίσχες αὐτοῖς ἀκοπιάτως πρὸς πᾶσαν ἡδονὴν ἰσχύοντα καὶ πρὸς πᾶσαν ἀρμόνιον γεύσιν*. The first clause, 'strong to every pleasure,' gives no meaning; but perhaps the Midrash Rabba may help us to emend and explain it. We there read (ed. Warsaw, 1876, ii. p. 37a) that the manna transformed itself *to suit every taste* *היה כל אחד מ'שראל טועם מה שהיה רוצה*; but secondly, that it transformed itself to suit every *age*; to those of middle age it became *bread*, to the old *honey*, to the young *oil*. From this we are perhaps justified in emending *ἡδονὴν* to *ἡλικίαν*. Whether this be right or not, the second clause, which is afterwards enlarged on, is definitely a Midrashic legend; and based (like all of them) on the comparison of different texts of Scripture with the application of the Haggadic logic.

The Yalkut Schim'oni gives further illustrations of this passage: *ἔτοιμον ἄρτον* means, we learn thence, *warm bread*; *ἀκοπιάτως* means that the manna came to the collector without trouble: the change in the creation *שנוי מעשה בראשית*, which the pseudo-Solomon notices, is there dwelt on by the Rabbis, and shown to be an illustration of God's love for Israel. The comparison of the darkness to a prison-house, in which the Egyptians were enclosed in order to punish them for their imprisoning the Israelites, is also from the Midrash (p. 79b), *לא חזרו חבשן בבית האסורים זה השך* 'They saw by whom the eternal light of the Law (of life, Arm.) was to be given to the world,' is a Midrashic phrase (p. 69a *אשר חלק י' אתם להאיר לכל העמים*). It is the Midrash which notices how the plague of hail and fire contained a miracle within a miracle (Wisdom xix. 20; Midr. Tanchuma, p. 77b). It is the Midrash which calls attention to the

appropriateness of the punishments, and to the moral of each event (אלא ללמדך 'to teach thee'; in Wisdom *ἐνα γὰρ ἐπεὶ*).¹ We learn therefore from the Book of Wisdom something of the early history of the Midrash; and the constant points of contact between the author of the book and the Palestinian Exegetes confirm the hypothesis that its author was of Jerusalem.

The subject has never, so far as I know, been worked; it is likely that it would be more profitable than the comparison of Wisdom with Greek philosophy.

The writer however must wait to know whether he is thought to have proved his case before drawing any further inferences.

¹ e. xvii. introduces the account of the appropriateness of the punishment of the Egyptians with a quotation from Ps. lvi. 3. It is remarkable that R. Jochanan introduced the same observation with the same quotation; *Peḳta*, ed. Buber, p. 81a. In the same work there is a passage curiously like Wisdom xiv. 15, ביום שהיה בכורו של אחד מהם מת צר איקונין שלו בתוך ביתו 'on the day when the first-born of one of them died, he drew a picture of him in the midst of his house.' Hence ἀσπὴν *asthen* probably stands for אבל בכור.

ART. VII.—*The Trisula Symbol.* By WILLIAM SIMPSON,
R.I., M.R.A.S.

It is only lately that the Trisula, or Trident, has attracted attention as a symbol. It so chanced that for many years back I have collected matter connected with this subject, and have often wished to put it in form for publication, but want of time has always stood in the way of realizing this desire. Lately contributions dealing with the Trisula have appeared in the *Journal of the Royal Asiatic Society* from Mr. Sewell and Mr. Pincott,¹ and I feel urged to add some additional material to what they have given. I shall not be able to reproduce everything that I have gathered up, but my endeavour will be to give what seems to be important, or may throw light on the subject. As to a theory of origin, I have one: it has long been formed in my mind, and up to the present I see no reason to reject it; or it might be expressed, that no better theory has as yet, so far as I know, been proposed.

The symbol appears to me from what I have collected to have been very widely spread, so very ancient, and assumed such a variety of forms, that its first origin has been lost, and that now only a guess can be made as to its primitive signification. I quite agree with Mr. Pincott that the trisula is not necessarily connected with the *chakra* or wheel; and that to explain the two together might leave both unexplained, because they are separate symbols. As this paper may in a sense be considered a continuation of the papers by Mr. Sewell and Mr. Pincott, I need not repeat the illustrations they have given. If the number of forms I produce

¹ J.R.A.S. Vol. XVIII. p. 364, Vol. XIX. p. 238. Fergusson, Cunningham, and others have touched upon the trisula in their works. Lately Le Comte Goblet D'Alviella, Professeur d'histoire des Religions à l'Université de Bruxelles, has published a short brochure entitled *Le Trisula ou Vardhamana des Bouddhistes*.

in this paper are accepted as variations of the trisula, it will have to be admitted that it is one of the most important symbols of the ancient world. I should be inclined to describe it as a universal symbol, for in one form or another it is found in almost all the old systems of mythology. The theory, which appears to me to be the most probable, that the trisula is a development of solar and lunar forms, as symbols of the creative power, would, I suggest, account to a certain extent for this universality. Whether this may be the correct explanation or not, I shall be able to show that a symbol of like form with the trisula had a high significance as a monogram or letter; that a similar form was a prominent feature on sceptres in the hands of gods, priests, and kings; and that, in whatever form it appears, it had a reference to the highest of the divine attributes. While admitting the value of Mr. Sewell's essay on the possible transmission of the trisula from one locality to another, it ought to be remembered that there are other symbols, as well as myths and folklore, which are involved in this consideration; and that the explanation of one point in this broad question is of little value unless it gave us some gleam of light on the whole. If we regard the *Ei* of Delphi as a trisula, we require a theory that would suggest to us why it was placed over the gate of a temple in that part of the world, and that trisulas were placed over the gates of stupas or temples in India. This similarity may have been the result of accident, but other examples of myths and folklore might be given which are equally puzzling, but whether they are all the result of chance, or that they imply a more intimate connection between ancient nations than we have yet realized, is a matter I hesitate to venture any opinion upon. The ordinary traffic between nations might account for some of the identities; but it scarcely supplies a sufficient theory as yet to satisfy us regarding all that is known.

The first suggestion of identity with the trisula which I shall bring forward is that just alluded to of the Delphic *Ei*. In an old edition of Plutarch I have, the date of which is 1718, the essay on this subject is entitled, "*Of the Word Ei*,

Engraven over the Gate of Apollo's Temple at Delphi." Plutarch explains that although called *Ei*, it was only the letter *E*, the fifth letter of the alphabet.¹ He says there was a golden one of Livia, wife of Augustus, and there was, or had been, a brazen one of the Athenians; to this he adds, "but the first and ancientest of all which is the wooden one." The word "engraven," as used above, would at first suggest that the letter was cut on the gate, but when the material of which it was formed is stated, it becomes more than probable that the symbol was a trisula, in form at least, and that it was placed "over the gate" of the temple. If this identification is accepted, how striking it becomes when compared with the trisulas over the gateways at Sanchi and Bharhut! It has also some force even in the case of the temples of Siva at the present day, where the trident is almost invariably placed, not on the entrance, but on the sikhara or spire. That the *Ei* of Delphi was a monogram only adds to the resemblance; for Sir Alexander Cunningham and others, although they vary in their interpretation, assume that the Buddhist trisula was also a monogram;² and there are other illustrations which can be produced of this symbol in that character.

It may be noticed that Plutarch's essay shows the symbol was not clearly understood in his time. Each of the persons he has introduced as discussing its meaning gives a different explanation; in this, Plutarch's essay bears a striking resemblance to the present discussion of the trisula; the writers show very divergent opinions, and as this results from the antiquity of the symbol and absence of direct information, so Plutarch's speakers were evidently in his time in a similar condition, and it would tend to show that then, as now, the symbol was so old, that its origin had been lost, and they

¹ See Pl. I. Fig. 19. This is from a Gnostic gem, and as it is a Greek *Z* it may be accepted as accurate enough.

² It may be worth noting that among the various meanings ascribed to the *Ei*, Plutarch seems to adopt that which ascribes to it the sense of "Being," as an attribute of the Deity, as if it was intended to express on the part of the worshipper "Thou Art," or "He" that "Is." From this some writers have identified the *Ei* with the Hebrew *Sh* or *Ih*, pronounced *Jah*, a form of the word *Jehovah*; the root of which is "to be," "to live," etc. It is easy to account for the transposition of the letters, by supposing that in one case they had been written from right to left, and in the other from left to right.

could only speculate regarding its meaning. If we take the explanation which Plutarch gives last as the one he most favours, it would show that he had a high notion of its symbolism. According to this it expressed the idea of Being, of that which is permanent and immutable as the character of the Deity, in opposition to the constant change and variableness which is seen in nature. This rendering would give it a sense very close to that of the celebrated "I am that I am" of the Pentateuch, and entitle it to an exalted rank among symbols.

I have another curious coincidence to produce, which is quite as striking as that just described. The Jews were noted for wearing frontlets or phylacteries on their foreheads. A phylactery was made of leather, and contained some passages from Scripture; on the outside of it, visible to the eye, was the Hebrew letter *shin* or S.¹ In Hebrew, Samaritan, Phœnician, in the Greek, and even in Egyptian hieroglyphics, this letter is formed more or less like a trisula.² In the Abyssinian alphabet there are two characters to represent S, and one is a trisula in form; it is named *saut*, and from being used in the word "Negus," it is called the royal S.³ The late King Johannes, when he became King of the Kings of Ethiopia, made a change in regard to this letter; he adopted the royal S in the spelling of his name. This shows at least that there was some dignity connected with this particular form. The *shin* on the phylactery is said to be the first letter of the name Shaddai, giving us another instance of this form as a monogram. Some of the Jews in the East still wear these frontlets with this symbol on them, and the coincidence will be seen from a sketch I give of a man's head from Benares.⁴ His sectarial mark is a trisula form, painted on the forehead. Of course the Hindu's explanation of the form is not the same as the Jew's; but this need not astonish us, for the symbol is understood differently in each locality where it is found. The striking thing here is that

¹ Pl. I. Fig. 13.

² See Pl. I.

³ Pl. I. Fig. 10.

⁴ Pl. II. Fig. 5.

you may find a man in Jerusalem, and another in Benares, each bearing a trisula-formed symbol on his forehead.

The Hindu, whose head I sketched at Benares, said he was a worshipper of "Seeta-Ram," from which it may be concluded that he was a Vaishnava. The symbol in this case is made with two colours; the external strokes and lower part are white, and the central stroke is red. In 1875 I visited Trichinopoly, and the Brahmins of the great temple of Srirangam told me this symbol is called Trinam or Trinama, and when there was a dot below, as in the sketch given,¹ it was called Tingalynam, and that when the dot was wanting, it was called Watagalynam. This slight difference indicated a difference of faith which was not explained. All the Brahmins had these marks on their foreheads, and they were also to be seen sculptured and painted on the temples. This shows at least that the symbol occupies a prominent position in the worship of Vishnu. On asking what its signification was, it turned out, after much cross-questioning, to be male and female, or Rama and Sita. The external, or white portion, being Rama, and the Brahmins said it represented his feet, and the central stroke, which is red or saffron, represents Sita. On our way from the temple we met a man and his wife; the man had the two white strokes on his brow, and the wife had the single saffron stroke. A Brahmin, who was the friend of one of our party, explained that this was in such a case the correct form.

It may be as well to notice here that beyond the similarity of form there is no evidence that these symbols have any connection with the trisula. This will also apply to others which I shall have to bring forward. All I can say is that they are very like each other in their general character, and being important symbols, they ought to be placed in a collection of data bearing on the subject. I am inclined myself to accept them as varieties of the one symbol, but it is impossible to speak with certainty about them. I may mention that the very different explanations which are given of each cannot form an objection to their identity. The

¹ Pl. II. Fig. 9.

symbol is evidently very ancient, and its signification, as is the case in all symbols, would naturally be liable to changes which will suggest themselves to any one who considers the subject.

While treating with this form in connection with letters, I had better here refer to an illustration from the Muhammadans. I do not know Arabic myself, but I have noticed in inscriptions that what I suppose to be the name of Allah is often given in an ornamental form, and in some instances it appears as a trisula. I was much struck with this in one of the tombs of the Caliphs at Cairo, where the Arabic letters are developed in this way on the top of the arched Mibrab.¹

There is one form in which the trisula appears, and here, in a number of cases at least, there need be no doubt about the particular symbol we are dealing with—and that is as a sceptre. In almost every temple of Siva the trisula is to be found: it varies slightly in shape: I give sketches of it as it appears on the Golden Temple at Benares, and in an old temple near to the Golden one.² In addition to this, Siva is, in sculpture and in pictures, generally represented with a sceptre in his hand, which is surmounted with a trisula. His sacti is often represented holding the same sceptre.

The Lamas of Tibet have a small sceptre, called a Dorjé, made of brass; it is about six inches long; it has a trident at each end. I give a drawing of one.³ Generally they are formed of two or four tridents, arranged in the manner to which a botanist would give the word "whorl"; in this form the tridents at each end have the appearance of a crown. The space between the tridents, or cluster of tridents, as the case may be, at each end, is just large enough for the hand to grasp this double sceptre, for the Lamas simply held it in their hands at particular parts of the service.

¹ Pl. II. Fig. 8. To prevent misconception here, I may state that this illustration is not given under the notion that the Muhammadans had any idea of a trisula, but merely to show how a sacred form may be repeated and continued by people who had no knowledge of the symbol they were using.

² Pl. V. Figs. 7, 8, 9.

³ Pl. III. Fig. 4. This one is exceptional, in having only the one trident at each end, but on this account it is better adapted to show the character of this ritualistic instrument.

The following is from Cunningham's *Ladak*: "The sceptre, *dorjé*, is the Vajra of the Indians. This holy instrument is said to have flown away from India, and to have alighted at Sera, in Tibet. That it was looked upon in India, from a very early time, as an object of reverence, or as an emblem of power, is proved by its being placed in the right hand of a raja in the Sanchi bas-reliefs, which date as high as the beginning of the Christian era. It is also sculptured on the rocks at Udegiri, where it is represented in one of the hands of Durga, who is slaying Bhainsâsur. This sculpture is as old as the seventh or eighth century. In Tibetan it is called *Sera-pun-dze*, and the annual festival which has been established in its honour is one of the principal religious ceremonies. The Lamas carry the sceptre in procession from Sera to Potála, where they present it to the Dalai Lama, who makes a salutation to it. They next take it to the Chinese officials, and then to the Khálons or ministers, all of whom make suitable presents of money; after which it is carried back to Sera with solemnity."¹

There is at Buddha Gaya a stone, the traditional seat on which Buddha attained Buddhahood; of course its date is much later. It is called the *Vajrásana*, or the "thunderbolt seat"; one of the ornamental belts upon it is formed of *Vajras*. The *Vajra* was the thunderbolt of Indra, and this forms another attribute of the symbol, which leads again to a striking coincidence to be pointed out shortly. It may be noticed that the thunderbolt of Indra is at times described as a quoit or discus; this was also the weapon of Vishnu; as the discus and trident are both weapons of the gods, they may perhaps be only variant symbols of the same divine power. This point may be of some consideration as bearing on the *Chakra*, for the discus of Vishnu goes by that name, and although not represented as a wheel, it is probably the same symbol.

Viswakarma, the architect or artificer of the gods, who corresponds with Hephaestos, is said to have formed the

¹ pp. 373-4.

discus of Vishnu, the trisula of Siva, and the Vajra or thunderbolt of Indra. According to one account he made them from parings of Surya or the sun, which he put in a lathe and turned.¹ This myth evidently implies a solar origin to all these weapons or symbols.

Hephaestus, the divine artificer of the Greek mythology, made the sceptre, and forged the thunderbolts of Zeus.² These thunderbolts are generally represented by an object not unlike a cigar, with a twist like a rope in it, and forked lightning projecting from each side. These of course are the later forms of the symbol. I give a representation of one of the older forms; it is from a coin I made a sketch of in the University of Athens.³ In the coins of Elis, which date about 400 B.C., the thunderbolt of Zeus appears, under slight variations, as in this illustration. Here it is a very palpable trisula, and bearing at the same time a striking resemblance to the Vajra or thunderbolt of Indra, and appears as if it were intended to be held in the hand, as the Lamas hold the Dorjé.

Poseidon and his trident are so well known that no illustration is required. In this case the trisula seems to be a sceptre, but it is endowed with wonderful power; it was by its means that Poseidon produced the spring in the Acropolis at Athens, and also the wells in the neighbourhood of Lerna. This points again to some analogy between the trisula and the chakra, for in India there are sacred tanks and wells which Vishnu is reputed to have made with his discus. The Manikarnaka well at Benares may be mentioned as an example. Poseidon also formed the beautiful valley of Tempe with a stroke of his trident.

According to some authors Hades had a sceptre with two prongs, but I give an illustration of what I may call the

¹ See *Antiquities of Orissa*, by Rajendralala Mitra, vol. ii. p. 148.

² According to Callimachus, in the hymn to Delos, the trident of Poseidon was made by the Telchines; they also made the sickle of Chronos; these, with the discus of Vishnu, appear as weapons, but I think they should be also considered as symbols.

³ Pl. III. Fig. 8.

medieval Hades, who carries an undoubted trisula as his sceptre.¹

In Rawlinson's *Five Great Monarchies*² there is an illustration representing an emblem carried in the hand of a priest. It is a peculiar form of a trisula, and is most probably a sceptre.³

In the Louvre is an old sceptre, which, if I mistake not, was the sceptre of Charlemagne. On my sketch I find that I have copied the following: "Main de justice que les Rois de la troisième race ont successivement porté dans les ceremonies de leur sacre et couronnement."⁴ The hand on the top is of ivory, and the handle is gold set with gems. The fingers of the hand are in the same position as those of a bishop when he gives the benediction. The thumb and two forefingers are held up, while the other fingers are bent. I am not entitled to affirm positively that the three upright digits in this case represent a trisula, but, as we have found that so many sceptres are trisulas, it raises a strong presumption that this is only another form of that emblem.

Whatever conclusion might be come to in this instance would of course involve the hand as it is held up in the Pontifical and Episcopal blessing, for they are exactly the same in this sceptre. I give a sketch of the hand of the late Pio Nono,⁵ in the act of blessing, and with it is a sketch of the hand as held up in the Eastern Church⁶ at the present day; this, although different from the other, still shows three fingers erect. This last form is supposed to have been practised also in the Western Church during the first three or four centuries, as it is found on sarcophagi of that period, and in early mosaics.⁷ I have never chanced to come upon

¹ Pl. IV. Fig. 7. This was at one time a standard subject in valentines, but the "old gentleman" has entirely disappeared now from this walk in art. I bought one in 1860, to keep as a popular representation of this personage, and the illustration is copied from it.

² Vol. iii. p. 431.

³ Pl. IV. Figs. 4, 5.

⁴ Pl. V. Fig. 6. This sceptre is represented in the armorial bearings of the late Emperor of the French; and may be seen in some of the coins of his reign.

⁵ Pl. V. Fig. 2.

⁶ Pl. V. Fig. 1.

⁷ Previous to the time of Nikon, about the middle of the seventeenth century,

any explanation as to how the Church invented this form of benediction with the hand, or what explanation is given regarding it. The Jewish form of benediction is performed with both hands; but in each hand the two smaller fingers are separated from the middle finger, as in the hand of Pio Nono, and the two thumbs are made to touch each other.¹ There is sufficient resemblance here to suggest some identity. In museums will be found bronze hands—and I think there are two in the British Museum—with the fingers in exactly the same position as in the benediction of the Latin Church;² their date I do not know, but I think they belong to the late Roman period; some of them were found in Pompeii. These hands have attached to them small figures of various kinds, such as a head like that of Jupiter or Serapis, the scales, and other signs of the Zodiac, etc. From this we may conclude that the hand in this position was a tolerably familiar symbol at one time, and that it was not exclusively Christian. The trisula being almost a universal symbol gives some probability to the supposition that the three fingers are only another form of the same. With our present knowledge I do not feel myself entitled to affirm more in relation to it. I have shown, so far as it could be made out, that the symbolism of the trisula was connected with some high attribute of the Deity, and this may perhaps be sufficient to account for the adoption by the early church of the three fingers in the act of benediction.

While dealing with the hand, I may mention the *toorah* or monogram of the Sultan. A marked feature of it is three strokes which project upwards.³ Its being formed of letters, and that it is a monogram, is no reason against its being another form of the trisula, which I am far from being prepared to declare that it is. I give it here only as a possible contribution to the subject. When in Constantinople some years ago, I discovered that the *toorah* was originally a *hand*,

the benediction in the Russian Church was given with the thumb and two first fingers held up, the same as in the Latin Church, with the slight difference that the thumb and the two fingers were made to touch. The "Old Believers" in Russia still maintain that this is the right form. Pl. V. Fig. 4.

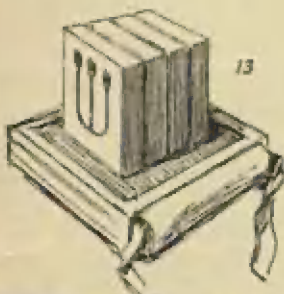
¹ Pl. IV. Fig. 2.

² See Pl. V. Fig. 5.

³ Pl. I. Fig. 20.

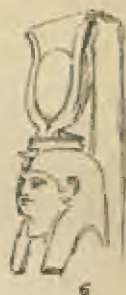


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1, 2. FORMS OF THE HEBREW ש , OR *Shin*. 3. SAMARITAN ש . 4, 5, 6. PHENICIAN FORMS. 7. GREEK ϵ . 8, 9. ANCIENT HEBREW SHINS. 10. *Shin*, THE ROYAL ש OF THE ABYSSINIAN ALPHABET. 11. ש IN EGYPTIAN HIEROGLYPHS. 12. THE PHYLACTERY OF THE JEWS. 13. THE "MAN IN THE MOON." 14. THE SUN IN ARMENT. 17, 18. SUN GOD SHAMAS, ASSYRIAN. 19. THE ϵ OF DELPHI. 20. THE SULTAN'S TOORAH.





1. SYMBOL FROM ROYAL COLLAR, NIMROUD. 2. LATE FLEUR DE LIS. 3. OLDER FORM OF FLEUR DE LIS. 4. HATHOR WITH SOLAR DISC IN HORNS. 5. HEAD OF A VISHNAIVA, BENARES. 6. ISIS WITH SOLAR DISC IN HORNS. 7. OLD FORM OF FLEUR DE LIS. 8. MIHRAB, TOMB OF THE CALIPHS, CAIRO. 9. TINGALYNAM.



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1. RUSSIAN CROSS WITH CRESCENT. 2. 3. ABYSSINIAN CROSSES. 4. THIBETAN DORJE. 5. TRISULA AS AN ORNAMENT, BHARNUT. 6, 7. GREEK GOLD ORNAMENTS, LOUVRE. 8. COIN OF ELIS, 4TH. CENT. B.C. 9. FLEUR DE LIS ON THE CLASP OF MANTLE OF ST. LOUIS, A.D. 1226-1270. LOUVRE.



1



2



3



4



5



6



7





1. GREEK FORM OF HAND IN BENEDICTION. 2. THE PAPAL HAND. 3. SYMBOL CARRIED AT JEYPOOR. 4. HAND IN RUSSIAN CHURCH, BEFORE TIME OF NIKON. 5. OLD BRONZE HAND. 6. SCEPTRE OF CHARLEMAGNE, LOUVRE. 7, 8, 9. TRISULAS OF SIVA.

and that it had been developed from that into its present form. I have been unable to find any of the early intermediate forms, so it is impossible on this account to say much about it. I was told that in early times the Sultan, when he had to ratify a treaty, a sheep was killed, he put his hand into the blood, and then placed it on the document as his "hand and seal." Malcolm, in describing the conquests of Timour, says that "The officers of the conqueror's army were appointed to the charge of the different provinces and cities which had been subdued, and on their commissions, instead of a seal, an impression of a red hand was stamped; a Tartar usage, that marked the manner in which the territories had been taken, as well as that in which it was intended they should be governed."¹ Although thus only a political symbol, it should be remembered that the hand had also a religious signification. There was the all-creating hand of the Supreme Being. The principal temple at Uxmal was dedicated to the God of the Working Hand; "The open hand of Ali, called Panjeh, from the five fingers, is one of the holiest emblems of the Shias."² Many references to the hand could be given in addition to these, but I shall add one, of which I give a sketch,³ it was among the emblems carried in the Sowarie of the Jeypoor Rajah when the Prince of Wales visited Jeypoor in 1876. I believe this combination of the hand and the crescent is not uncommon in India, and it may be of some value in reference to the origin of the trisula, as I incline to the theory that it is a combination of solar and lunar symbols. That there was some connection between the hand and these symbols we have the evidence of Suti monuments, where there is always represented a hand, and on each side of it the sun and moon.⁴

¹ Malcolm's *History of Persia*, vol. i. p. 465.

² *Proc. Roy. Geogr. Soc.* 1884, p. 504.

³ Pl. V. Fig. 3.

⁴ "Thus we see that in the Veda-Savatar, one of the names of the sun is 'Golden-Handed.' Certain it is that the early theological treatises of the Brahmins tell of the sun as having cut his hand at a sacrifice, and of the priests having replaced it by an artificial hand made of gold. Nay, in later times, the sun under the name of Savatar, became himself a priest; and a legend is told how, at a sacrifice, he cut off his hand, and how the other priests made a golden hand for him."—Max Müller, *Science of Languages*, p. 378.

It is not uncommon for sceptres of the west to be surmounted by a fleur-de-lis. This brings forward the question as to what the fleur-de-lis is. To this there have been a great number of explanations. The iris and lily flowers, a lance-head, bees, and frogs, have been given as the origin; these suggestions show as much variety in theory as we have in the efforts to explain the trisula. The first thing to be done in an attempt to understand a thing of this kind is to find out what we are really dealing with. The fleur-de-lis of the present day shows the members forming it continued through the cross-bar, and under the influence of the French ornamental art of last century, the whole became highly floreated. This has entirely changed the appearance of the emblem. The fleur-de-lis in this form dates only from about two centuries back; previous to that the three members of which it is formed terminated at the cross-bar, and there was only a small trefoil or handle below. In its early form it was simply a trisula. I give sketches of the modern form, and these can be compared with the older, of which I give one or two.¹ The small one which forms the ground on the clasp of St. Louis is perhaps the nearest to the general appearance of the earlier period. I cannot pretend to be an authority in heraldry, but I understand that although badges and distinguishing devices are old enough, that science which is known as heraldry in our own day appeared in Europe about the time or shortly after the Crusades, and there is the probability that many of the emblems were then brought from the East, and among them the fleur-de-lis.²

¹ Pl. III. Fig. 9, and Pl. II. Figs. 2, 3, 7. Fig. 2 is the modern form.

² I have a French work, published in Paris, *Recherches sur l'Origine du Blason, et en particulier sur la Fleur de Lis*, par M. Adalbert de Beaumont, which I would refer to; what I have given above, as to the period when the fleur de lis appeared in Europe, is the theory of this writer. I may mention that the fleur de lis appears in the Bayeux tapestry, and if that work of art was made immediately after the Conquest, it would throw a doubt on de Beaumont's ideas, or at least on the particular form in which he puts them. It may be also remarked that this writer does not show he has a large knowledge of the trisula, or trident, in the East. He states that "le roi Clovis reçut d'Anastase, empereur d'Orient, le sceptre fleurdelisé." That would be about the end of the fifth or beginning of the sixth century. This would make sceptres with the fleur-de-lis on them possible in Europe during five centuries before the Crusades; but it would still indicate an eastern origin for the emblem, a very important point in connection with this subject.

I give what I understand to be a crown from one of the Assyrian figures in the Louvre.¹ Bononi gives a drawing of a similar crown in *Nineveh and its Palaces*,² and in that work is a representation of Dagon³ with the same crown. Each of these crowns is surmounted with an ornament which is described as "a fleur-de-lis," but it might be called a trisula. The same symbol appears in the British crown as a fleur-de-lis. It would be rash in the present state of our knowledge to affirm that these are all the same symbol, and that they are connected with the trisula; all that can be said is, that if the fleur-de-lis came from the East, it is just possible that it is a continuation of the important symbol we have here under consideration. It has been shown in this paper that the trisula was a divine sceptre in the hands of gods, and we may presume that it was an emblem of their supreme power; it has also been shown that priests have used the same symbol in worship; and we may here again suppose that it represented the divine attribute. In most religious priests claimed to be the Vicars of the Deity, and the Divine Right of Kings was based upon the same assumption. Having these pretensions, priests and kings would naturally use the recognized symbol as the diploma of their authority, and as evidence of the power they wielded. If the symbol was right and fitting for a sceptre, it would be right and fitting to adorn a crown.

In India the trisula became an ornament, and as a jewel was worn at an early period. On the Stupa of Bharhut there is a belt of ornament, in which the jewelry of the time is introduced as a prominent feature; there are bracelets, necklaces, bangles, etc., and among these ornaments the trisula is repeatedly given.⁴ They are represented in pairs,

¹ Pl. IV. Fig. 3.

² P. 434.

³ P. 168. See also Layard's *Nineveh and its Remains*, vol. II, p. 463, where it is stated that this is on a bas-relief from Khorsabad. Layard, in *Discoveries in Nineveh and Babylon*, p. 343, gives another representation of this Fish-god from a gem in the British Museum which has the same crown. I have seen this often referred to as the fleur-de-lis, but it is possibly nothing more than an ornament.

⁴ *The Stupa of Bharhut*, by Alexander Cunningham; see Plates xliii., xlv., xlvii., xlviii., xlix.

but one is figured as an earring.¹ Although worn as personal ornaments, we may suppose that they were most likely looked upon as charms, because almost all important symbols had this character ascribed to them. In the West the fleur-de-lis has long fluctuated between symbolism and ornament; and, as in many other cases, it is often difficult to say which character should be ascribed to it. In the royal crown it seems to be only a badge or mark of distinction. In the Louvre I one day noticed among the old jewelry, which was common at an early date to both Greeks and Romans, a number of objects in which the trisula form is very marked. I give illustrations of a couple of these,² but of course I can say nothing about the intentions of the artists who fabricated these ornaments. I have designed ornaments myself, and I am aware of the tendency there is in art of this kind to produce forms similar to the fleur-de-lis or the trisula. In architecture, particularly in Gothic, terminal ornaments are very apt to assume this character. De Beaumont's book on the fleur-de-lis, which has been already referred to, is full of these forms, most of them being, I think, only ornaments, and it rather detracts from the character of the work as an authority to find these figuring as a fleur-de-lis.

The illustrations given in this paper are sufficient to show that the trisula was a sceptre in the hands of more than one deity. As it represented in some way the divine power, it became a sceptre in the hands of priests, and was used in rites and ceremonies. If the fleur-de-lis be accepted as a form of the trisula—but that I confess is theoretical—this symbol appears on the sceptres of kings, representing their earthly power, but that is a natural result of the theocratical ideas which were connected with monarchy in the past; if the trisula was a symbol of divine power, the priest or king claimed to represent that power in this lower sphere. As a monogram, a very high significance was ascribed to it; as a symbol, it occupied a prominent position in temples, and men wore it on their

¹ Pl. III. Fig. 5.

² Pl. III. Figs. 6, 7.

persons as an outward mark of their faith. In every case it occupied a very sacred position, so much so that I have for a long time considered it to be about the most important of all the symbols that have come down to us. It can be traced back to a remote antiquity. I doubt if any other symbol was as widely accepted as this one was in the past; it is found over nearly the whole of the ancient world, where it figures in the Greek, Assyrian, Buddhist and Brahminical systems.

As to its origin, I incline to the theory that the trisula or trident grew out of the combination of the solar and lunar symbols. I think this is the most likely explanation, as it would account for its sacred character, as well as for its extension through so many systems. As these two symbols represented the dual creative, or re-creative power of the universe—the power which continues all life, both animal and vegetable—their conjunction became a fit emblem of the divine energy that preserves and rules. It expressed the power that produced cosmos out of chaos. If it symbolized the great mystery of life, either in its origin or in its continuation, it would equally symbolize the mystery of life in the future. All races have manifested a faith or hope in a life beyond death, and that death was only a re-birth into another world; and it was natural to look upon the power that first produced life and continues it as the power that would still farther preserve that life beyond the grave. If this far-reaching symbolism belonged to the trisula, it would explain the sacred character it possessed; and it would enable us to understand why it was a sceptre in the hands of gods, because it represented their highest attribute.

The development of the two symbols into the particular form of the trisula was a process which presents but little difficulty. The lunar symbol was the crescent. The full moon is a very beautiful object in the sky, but the crescent form was that which distinguished it from the round disc of the solar orb, and for this reason we may suppose it was adopted. Now the crescent is almost a universal symbol: it is found connected with nearly all the old mythologies. A

collection of illustrations would be the best method of showing this symbol and its relation to the ancient systems, but that is out of the question here. It was the symbol of a large number of the principal female divinities. The great Diana of the Ephesians was not the moon, she was, as her statues show, the great mother—the prolific Mother Earth; and the crescent was the symbol of this. All things were said to have been produced by Mother Night, or out of darkness; this was only another form of the symbolism, and it may suggest one reason why the lunar orb became connected with the power. According to this theory the central portion of the trident is supposed to have resulted from placing the solar emblem within the crescent, either as the sun itself, or as a symbol of the sun; and it thus became equivalent to the old Androgynous notion of the deity, of which traces are to be found in India, Egypt, Greece, and other parts of the world.¹

I shall now give some illustrations of the combination of the crescent with the sun, or the male power. The first is a rough copy of Osiris from the Serapeum at Sakkarah.² The head of the figure is here surmounted by the crescent, in which is the sun.³ The next is a head of Isis, in which the horns of the cow seem to represent the crescent; it is from the tomb of Psammetichus at Sakkarah.⁴ Another is the figure of Hathor,⁵ who in her attributes was closely allied to Isis; here again we have the horns inclosing the solar disc; this also was found at Sakkarah, and the originals of these

¹ The Androgynous form of the deity was simply a personification of the creative power. As Ardhannari in India, it was the combined figures of Siva and Parvati. Hermaphroditus was, as the name implies, Hermes and Aphrodite. Dionysus was also represented with the twofold nature. In Egypt the Nile was represented by a figure which is distinctly male and female. Genesis i. 27 may also be referred to. The legend of the Amazons has long been a subject of speculation; my suggestion is that they had an Androgynous type for their deity, and this, from some cause or another, came to be associated with the people of the race, and the one was confused with the other. The Ardhannari of India is perhaps a survival of the Amazonian deity, for it wants the right breast, because that side represents Siva; the left is Parvati, and has the female form of the breast.

² Pl. IV. Fig. 6.

³ "The orb of the sun imitated in gold is placed between the horns."—*Harold's*, ii. 132.

⁴ Pl. II. Fig. 6.

⁵ Pl. II. Fig. 4.

are in the Museum of Bulak. The small amulets which represent the sun in Amenti become another illustration.¹ In most of these the sun is in a crescent, but in some the crescent is represented as a triangular space. These small objects, worn as charms, had a reference to the passage of the soul; each soul became Osiris, and the supposed movement of the sun in the under-world was the type. In this case it might be inferred that in these simple forms we have a symbolization of the creative power by which the individual is reborn into blessedness in the next world. That this was the meaning is, I think, fully established by the following quotation from *The Book of Respirations*:

"the Book of Respirations

made by Isis for her brother Osiris,
to give life to his soul,
to give life to his body,
to rejuvenate all his members anew;
that he may reach the horizon of his father, the Sun;
that his soul may rise to heaven in the disk of the Moon."²

The ancient Egyptians believed in the resurrection of the body, which is indicated by the above extract, but the words also express the rebirth of the soul, thus adding a spiritual significance to the symbolization. In this case the moon becomes a kind of vehicle, but in others it appears as the place of the male power, or as a receptacle of it. In the *Strôzahs* of the Zend books it says: "We sacrifice unto the Moon that keeps in it the seed of the Bull."³ It is sufficient for my purpose here that the bull represents the male power, but it would be no great stretch of assumption to suppose that the bull in this instance is that of the Zodiac, which at one period was a symbol of the solar power in its recreative aspect at the vernal equinox. I give two illustrations from Rawlinson's *Five Great Monarchies*, to show that the Assyrians represented the emblems of the sun god Shamas within the crescent.⁴

¹ Pl. I. Figs. 15, 16.

² *The Book of Respirations. Records of the Past*, vol. iv. p. 121.

³ *Yasts and Strôzahs, Sacred Books of the East*, vol. xiii. p. 16, also at p. 8.

⁴ Pl. I. Figs. 17, 18.

From the same authority I give a representation of Sin, the moon god of the Assyrians, in which we have a possible development towards the trisula form. In this the god is male, but it agrees with the other illustrations by showing the male within the female emblem.¹

We are all familiar with the well-known legend of "The Man in the Moon," who was placed there as a punishment for gathering sticks on Sunday. After what has been said about the male power in the crescent, it will strike any one that this is either a very curious coincidence, or it is a survival of the old idea which has come down to the present day. I give an illustration of this, said to be in a church at Conway.² Here again we have a development which produces a form similar to that of the trisula.

Reference may be here made again to the golden hand of the sun in the crescent, which has been already referred to. In this we have a form closely approximating to the trisula, and evidently from a development such as the theory of this paper suggests. The *lingyoni* of the Saiva worship might be brought forward as another illustration. In this case the female power is not represented by a crescent; but if that symbol took the place of the yoni, a perfect trisula would be the result.³

The Turks have adopted the crescent, embracing the sun or a star, and often in the form of a pentalpha; the crescent in this case is supposed to have been derived from the old Byzantine symbolism; and traces of this symbolism are still to be found in the Eastern Church. The Russian Church, which owes its origin to Byzantium, places a crescent under

¹ Pl. IV. Fig. 1. I am aware that in some cases the moon was called male. This would be an important point to deal with, but its full consideration would be rather complicated to go into here. It is sufficient for my purpose that the moon was generally considered to be feminine. My own impression is that the two powers were so intimately connected as symbols, that the name of the one became the name of the other, or of both. We have many instances of this in language; the use of the word "throne," when we mean the "monarch" who sits in it, is a good illustrative example.

² Pl. I. Fig. 14.

³ The Vaisnavites, already noticed, who have the trisula painted on their foreheads, explain it as male and female, but they have somehow or another transposed the gender of the symbols.

the cross,¹ an arrangement which is much older than what is called the "triumph of the cross over the crescent," that being the usual explanation. The Abyssinian Church also places a curved form under their large processional crosses, which looks as if it were derived from the crescent.²

These examples are produced merely to show that if a crescent form is adopted, and a symbol, solar or otherwise, is placed within it, how easily the trisula symbol might be evolved.

Many other illustrations might be given which would help to support the theory of the origin of the trisula I have ventured to suggest. I cannot affirm that the theory has been established into a certainty. All I can say is that the view of the case here presented is the one which seems to me to be the most probable, and that which is in the greatest conformity with the data I have produced. The illustrations given will show that the trisula had from a far back period a wide acceptance as a symbol over a large geographical space. How to account for this is a difficulty which belongs to many other matters connected with mythology and symbolism. Whether ideas in the past were carried from one nation to another by means of commerce, conquest or immigration, or had separate developments, is a problem in many cases I think we are as yet far from being in a position to solve in a satisfactory manner. Whatever may have been the origin of the trisula, if its existence in countries so widely separated could be explained, the solution would be a most valuable contribution to our knowledge of mythology.

¹ See Pl. III. Fig. 1.

² See Pl. III. Figs. 2, 3.

ART. VIII.—*Notes on the Early History of Northern India.*

Part IV. *Essay on the Pre-Vedic History of India and the Identity of the Early Mythologies of Europe and Asia, founded on a Study of the Brāhmaṇas and of Sacrificial Observances.* By J. F. HEWITT, Esq., M.R.A.S.

IN the previous papers of this series I have tried to trace in outline a truthful sketch of the general course of early Indian History. The evidence I have consulted and set forth has led me to believe that the government, social institutions, and the fundamental principles of the religion of the country all originated among tribes for the most part of Dravidian race, who came into India from the Euphrates valley. In dealing with this evidence I have tried to trace the origin of the tribes who successively and simultaneously ruled India, the races to which they belonged, and the religious beliefs they held. In doing this I have also adduced proofs to show that the same races who introduced civilized and stable government into India performed the same task in the countries of Western Asia, in Egypt, Greece, and Italy. In the course of my argument I have laid stress on the value of early religious and astronomical history as a guide, not only to the social history of India, but to that of all countries ruled by immigrant tribes of Akkadian race. My conclusions as to Indian history were formed chiefly from a study of the Mahābhārata and Rīgveda, and these authorities were largely supplemented by references to Greek and Latin historians, to Akkadian and Assyrian history, and by information derived from the present state of the country, its religious movements and social institutions.

The most valuable and conclusive evidence I have found

in the course of my inquiries is that derived from the discovery that the Hindus not only measured time in very early ages by a year reckoned by lunar months of twenty-eight days each, but that the measurement of time and the accepted popular and official theology were most closely connected together. I have, I believe, in the previous papers of this series, proved that the lunar year was used by the people of India for ages before they adopted the solar year, which has now for thousands of years been the official measure of time. It was from a comparison of the Brāhmanas with the Mahābhārata and the writings of Indian astronomers that I have been able to show (1) That the most ancient gods of India were those who became afterwards gods of time; (2) That the fifty great gods of the Akkadians, early Hindus and Greeks, were the dominant gods of the two original years, the year of ten lunar months of twenty-eight days each, which was afterwards extended by the result of astronomical observations to the full lunar year of thirteen months.¹ I have further pointed out that Assyrian and Egyptian chronology prove that the solar year was first adopted about 4700 B.C., and that the beginnings of the very

¹ I must here note what further inquiry has shown me to be an error in my discrimination of the fifty great gods. I treated them as being divided into the twenty-seven Nakshatra, or phases of the moon, which in the Hindu sacred calendar represented the lunar year, the lunar year of thirteen months and the ten months of the year of gestation. This is the division in the Mahābhārata. But I have shown in the Appendix to this essay that the Nakshatra were originally twenty-eight in number, and that they represented the days of the lunar month, and that the twenty-seven Nakshatra used to denote the sacrificial year among the Hindus were only adopted as a measure of the year when the five years cycle reconciling the solar, lunar and sidereal year was formed. There is no evidence that this cycle was ever used in Greece, and consequently the fifty daughters of Eodymion and Danana must mean fifty-one gods including the father, namely, the twenty-eight days of the lunar month, the thirteen months of the lunar year, and the ten months of the year of gestation. These fifty great gods and their father, which include, as I show in the Appendix, Prīam and his fifty sons, must have been distributed all over the world long before sun worship and the solar year were introduced, and the interpretation given in the Mahābhārata as to their number only proves that the whole system of measuring time by the moon had been so engrained in the public mind that it was necessary to connect the new solar measurement of time with the older lunar system before the innovation would be accepted by the people and by their priestly guides, whose instincts were essentially and even obstinately conservative. But both the lunar and solar systems of time measurement took their rise in the Euphrates valley, and from thence penetrated into other countries. Such modifications as were made in those countries where astronomical studies were subsequently pursued principally consisted in endeavours made by adopting cycle measurements to adjust the difference of lunar and solar time.

gradual evolution of religious and scientific inquiry which produced the year of ten months, and the lunar year of thirteen months, must date from a very much more remote period.

When examining the Śatapatha and Aitareya Brāhmaṇas in the course of these investigations, I was much struck with the value of the historical evidence to be gathered from them. I found everywhere strong confirmation of the general correctness of the deductions I had made from other sources of evidence, and a further and fuller study of these treatises has convinced me that they are most useful, and, indeed, indispensable guides to those who wish to trace out clearly the early stages of the history of Indian civilization. In the first beginning of national life religious observances were in all countries the earliest and most important of state ceremonies, and therefore a complete record of the successive changes in the national ritual, such as these and the other Brāhmaṇas furnish, indicate not only changes in religious belief, but must also give most trustworthy and accurate information as to the successive stages passed through by the people of the country during periods so remote as to be only dimly shadowed forth in the most ancient and darkest legends.

A little consideration will show that this opinion is well founded, and that the evidence to be gathered from authoritative ritualistic manuals is of immeasurably greater value than that given by legends and traditions. These manuals are the authorized rules for the guidance of priests and sacrificers prepared by the official priesthood, who had for innumerable successive generations been the careful guardians of the ancient laws governing religious observances, which laws were looked on as involving the penalty of death for any breach of their injunctions. They therefore state with the utmost exactness, not only the ceremonial rules accepted as correct when these treatises were written, but also embody those handed down to the transcribers by their predecessors, beginning with those promulgated in the very earliest dawn of religious thought. In the course of ages no old ceremonies

had been lost, but new ones were added on by an agglomerative process, and each addition did not involve the alteration and abandonment of those previously accepted.¹

But, it will be said, if these treatises were written by a priesthood which was, or claimed to be of Aryan descent, they would only give rules for the worship of gods recognized by Aryans, and would not tell anything about those to be observed in sacrificing to pre-Aryan deities. That this is not a correct conclusion may be at once proved by a reference to a statement in the Śatapatha Brāhmaṇa that the sacrifice is of equal measure with the year,² coupled with the further declarations that the year is Prajāpati³ and the year is Vishnu.⁴

Now Prajāpati is, as I shall prove, the moon-god, the god of the old lunar year, and Vishnu, originally Vāsuki, is the snake sun-god of the solar-lunar year, and neither are Aryan gods. Therefore the references made to them as gods to be honoured, and the sacrifices directed to be offered to them in the Brāhmaṇas are offerings to non-Aryan gods who were worshipped before the guardianship of the rituals was assigned to Aryan priests. It will, therefore, be seen at once that there are recognized as great gods in the Brāhmaṇas other and older gods than those who were worshipped by the Aryans. I have further, in dealing with the general history of India, shown that the Aryans made their way to supreme power chiefly by their diplomatic and political ability, by their readiness of resource, the religious reverence inspired by their missionaries and the best of their priests, and by alliances and marriages with the ruling races, and they

¹ Alteration, even when initiated by Aryan or northern races, who were always Protestants and reformers, was always made in fear and trembling, and, as will be shown in the sequel, the greatest care was taken in these alterations to avoid showing disrespect to the older gods.

² Śat. Brāh. iii. 1. 3. 17. vol. xvi. p. 16. Except where otherwise specified the numerous references to the Śatapatha Brāhmaṇa throughout this essay will be made to the Series of Sacred Books of the East, vol. xii. containing Kāṇḍas i. and ii. and vol. xvi. containing Kāṇḍas iii. and iv. of Prof. Eggeling's translation of that treatise.

³ Śat. Brāh. iii. 2. 2. 4. vol. xvi. p. 37; i. 2. 3. 13. vol. xii. p. 62.

⁴ Śat. Brāh. i. 1. 2. 13. vol. xii. p. 15; i. 2. 6. 7. vol. xii. p. 60; i. 9. 3. 9. vol. xii. p. 268.

could not therefore ignore or disregard the older gods of the country. The other races who preceded the Aryans seem to have in almost all cases amalgamated with the people without destroying or subverting their institutions. In the history of invasions and conquests made by new tribes in other countries in early times, it appears that the first object of the conquerors was to propitiate the gods of their new territory, and they used to worship them instead of treating them with contempt. For this purpose they were obliged to inquire carefully into the details of the religious ceremonies with which the gods were approached, and to enlist the services of the priests. Consequently the establishment of the power of a new tribe only meant an addition to the previous rites, for those to the old gods were continued as before, while sacrifices to the gods of the new rulers were added to the ritual.¹

In order to understand fully the reasons which necessitated this method of procedure the strength of the feeling of veneration for accepted religious observances must be thoroughly appreciated, and we must fully understand how great was the difference between the ancient and the modern spirit. The minds of the earliest races of mankind were saturated with the fear of the unknown, and it was this which was the first incentive to sacrifice. The savage who tried to propitiate the unknown being, to whose agency he attributed any calamity from which he suffered, was always inclined to repeat the use of means which he thought had been once efficacious in averting the wrath of the hidden powers whom he feared. But this repetition to be effective must necessarily be exact, and hence a scrupulous attention to details became at a very early period an indispensable condition attaching to religious ceremonies.² When these ceremonies became, as

¹ See with reference to these remarks the narrative given later on showing how the Aechārāka, the priests of the moon-god, were taken on as assistants in the Soma sacrifice of the Indra worshippers.

² See with reference to the immense importance attached to minute exactness in similar cases Maine's *Ancient Law*, p. 276, where he says: "An ancient conveyance was not written but acted. Gestures and looks took the place of written technical phraseology. Any formula mispronounced or symbolical act omitted would have vitiated the proceedings as fatally as a material mistake in stating

they very soon did, public functions, ritualistic correctness was still more strongly insisted on. Sacrifices offered for the tribe became important matters of state, and though when the fire-worshippers introduced the domestic sacrifices to the gods of the household fire, an additional class of private sacrifices was added to those which were all previously public and official, this addition did not detract from the great importance which still continued to be attached to tribal and territorial sacrifices. The yield of the crops, the increase and well-being of the tribe, and of their herds and flocks, success in foreign wars, and the safety of the people from intestine disturbances, pestilences and famines, were all held to depend on the due performance of religious rites. Consequently, from the earliest institution of these ceremonies it was thought to be absolutely necessary that no mistakes should be made in their performance, and the rules prescribed for each rite must have been handed down from generation to generation as the most precious of national possessions.

Ceremonies thus sanctioned increased in number in progressive states as new tribes came into power and brought in new tribal gods. These gods were, as I shall show in the course of this essay, increased at a very early period by metaphysical speculation, and additions of this kind were in India made ages before any of the hymns of the Rigveda were written. But these were not the only additions. I have already shown the very early changes made by calculations as to the succession of time and the influence of the moon as its measurer. By this, which was the earliest form of scientific research outside those undertaken for purposes of immediate utility, the gods of time were added to the gods of generation and the local deities. But the worship of these new gods did not abrogate the ceremonies due to their predecessors. These continued to be offered

the uses or setting out the remainders would two hundred years ago have vitiated an English deed." The king in laying down the law was supposed to be speaking by divine inspiration, and strict attention to details in carrying out a law hallowed by divine sanction was derived from the same feeling as that which made ritualistic exactness necessary.

even by the Aryan priesthood, and though the Indra worshippers and their Aryan successors, who were much bolder innovators than the older priests, somewhat altered the form of the sacrifices, and though they also introduced the great change from tribal to family life,¹ yet they did not dare to ignore the old gods. Even among nations who were strongly imbued with Aryan ideas the tendency to the strictest conservatism in the maintenance of their revised ritual continued to predominate over the innovating spirit. They and others who introduced changes and additions continued to be no less afraid of the old gods than the most conservative of their predecessors. Though these gods were less powerful than those of the conquering and superior race, they must still receive their wonted dues, otherwise they would be angry and might do mischief. Hence the religious ceremonies which had once been accepted by the older priesthood were also regarded by their successors as no less hallowed than they had been thought to be by those who originally consecrated them, and the fear of the anger of the older gods always remained in early civilization as the most potent factor in promoting religious continuity. Furthermore, as religious ceremonies were among the most important political institutions, and Church and State were really the whole community looked at from different points of view, the feeling of reverence and awe made the very strong conservative element in ancient governments still more strong, and retained tribes which had once been separate units as component parts of a nation bound together by the worship of the same gods.

It therefore appears that this seemingly excessive veneration for what looks to us to be trivial and unmeaning ceremonies was really a necessary conclusion from the premisses accepted by these early reasoners. Its intensity and great importance in explaining primæval history is well illustrated by the following remarks of Mommsen on the

¹ Introduced probably by the sons of Kuṣ, called in India the Kuṣikas, who came into India from the Kabul valley, and who calculated the full lunar year of thirteen months.

political power of the Roman priesthood. In the first place he notices the fear of the gods expressed in the idea that the ceremonies due to each were a debt, the payment of which would be rigorously exacted by the gods who would be defrauded by its non-performance. "The gods," he says, "confronted man just as a creditor confronted the debtor, each of them had a duly acquired right to certain performances and payments."¹ This, though tempered by Roman ideas of the majesty of law, is the same idea as is expressed in what is perhaps its original form in the Hindu Brāhmaṇas, where the sacrifice is treated as a debt by the payment of which the sacrificer redeems himself from the gods.² It appears also in the Jewish consecration of the first-born to God.³ As to the increasingly exacting attention paid to details by the later priests Dr. Mommsen says: "The later priests pushed the natural rule that no religious service can be acceptable to the gods unless performed without flaw to such an extent in practice that sacrifices had to be repeated thirty times in succession on account of the mistakes again and again committed, and that the games which also formed part of divine service were regarded as undone if the presiding magistrate had committed any slip in word or deed, or if the music had paused at the wrong time, and so had to be begun again afresh, frequently for several, even so many as seven times in succession."⁴

Veneration for details such as is here depicted will be found to be an invariable accompaniment of every ritualistic system, and in the course of this essay I shall bring forward ample evidence to prove the historical importance of some of the smallest minutiae insisted on in the Brāhmaṇas. Each of them had a special meaning, and in judging of their relative importance in the Hindu system we have the great advantage that we are not dependent upon one treatise, but can compare a number of different manuals issued by

¹ Mommsen, *History of Rome*, translated by W. P. Dickson, vol. I, p. 181.

² *Sat. Brāh.* i. 2. 3. 5. vol. xii. p. 49, note 3.

³ *Ex.* xiii. 11-14.

⁴ Mommsen, *History of Rome*, translated by W. P. Dickson, People's Edition, vol. II, p. 400.

different and independent schools. Consequently what is accepted by all the schools as correct must be regarded as a completely recognized and sanctioned dogma.

But a further question as to the historical value of these Brāhmaṇas arises when we consider what evidence they give as to the time when ritualism began. Though it may be pre-Aryan, it may not extend so very far back in the remote past. But this conclusion cannot be admitted, for I hope to prove most conclusively the very great antiquity of the earliest ritualistic customs recorded in these treatises. I hope to show that a complete ritualistic code of forms and ceremonies existed ages before the Rigveda was thought of or sacrificial hymns were chanted by the priests, and that the rites prescribed by these old traditional, but carefully preserved, codes are found in the Brāhmaṇas in forms which it is true have been altered, but in which the old spirit is still preserved. One proof of this is to be found in the rules for animal sacrifices. These are pre-Aryan, and in most of the sacrifices authorized in the Brāhmaṇas rice and barley cakes are confessedly substituted for the animal offering, but in the great Soma-sacrifice the animal offering was still continued. In the rules for this offering in the Śatapatha Brāhmaṇa it is ordered that the animal should be strangled, "and not struck on the frontal bone after the manner of men," or stabbed behind the ear "after the manner of the fathers."¹

The sacrifice by strangling is, as will be shown later on, a Scythian custom, but the passage further shows that before the Scythians, or Sākas, altered the ritual by strangling the victim, there were two previous ways of killing it, each of which was apparently sanctioned by previous ritualistic rules. Of these two discarded practices the first must have grown to be recognized as orthodox, and the substitution of the second for the earliest method betokens a religious revolution accompanying a change in the ruling race, and these second rulers were in their turn evicted by the Scythian invaders.

¹ Śat. Brāh. iii. 8. 1. 15. vol. xxvi. p. 190.

I shall show in the sequel that this last invasion must have taken place long before the Rigveda began to be written, while the more ancient method of stabbing the animal behind the ear was that of the Fathers, who are called in the Brāhmaṇas the Pitarah Somavantaḥ, and who were snake and moon worshippers. I do not believe that any scholars will refuse to admit that the Rigveda itself is a ritualistic work, and that these hymns could not have been composed and preserved except among a people by whom a carefully arranged ritual had been used for ages as the ruling form of all religious ceremonies. I hope to be able to prove by actual examples that the new changes which were made after much deliberation by conquerors and new-comers did not obliterate the old forms, but that the gods of the old religions were preserved, some as subordinate to, and others as equal with the new. In the successive revolutions caused by the introduction, first of fire-worship, and secondly of the worship of Indra, which degraded the snake-gods to a subordinate place among the official deities, and in the still greater revolutions caused by the introduction of sun-worship and the solar reckoning of time, and by the sanctification of the household fire, the continuity of the worship of the great mother earth, the male father of all beings, and the moon-god, the heavenly ruler of the triad, who were the supreme gods before all these successive innovations began, was still preserved.

Evidence of the great Antiquity of Sacrificial Forms.

But what gives still more important, and what seems to me to be irrefragable evidence of the great antiquity of Hindu sacrificial forms is the calendar on which they are based. No scholar who has studied the subject can refuse to admit with Max Müller that the division of the heavens into equal sections called Nakshatras, which mark the passage of the moon in her monthly courses, is at the root of these sacred calendars, and that without these lunar months none of the sacrifices enjoined in the Brāhmaṇas could be carried

out.¹ But these Nakshatras appear in the Brāhmaṇas as part of a scheme for reconciling by the use of a cycle of five years the lunar, solar and sidereal years, and in this cycle they are reckoned as twenty-seven in number.² They appear there as phases of the moon, and the mention in the Rigveda (i. 133. 6) of the Nakshatras, under the name of Maruts, as twenty-seven in number, proves that this cycle was known to the Vedic poets. But before these Nakshatras were used as component parts of the lunar year they were twenty-eight in number, and they then represented the days of the lunar month. In a passage quoted by Max Müller³ from a Hindu astronomer who records the opinions of Mādhava it is said that "The Nakshatra month consists of the passage of the moon through all the Nakshatras," and this opinion he shows is that accepted by Patanjali and Garga, two other ancient astronomers. From this it appears that the Nakshatra days on which the sacrifices were based represented the days of the lunar month. It will be shown further on that the primitive year consisted of lunar months and five seasons. But this early year was that used before the ten lunar months representing the period of gestation had been considered sacred, and this division of time, which was by the Romans called an "annus," or year, preceded the full lunar year of thirteen months. The year of five seasons also preceded those based upon the six seasons, which the Brāhmaṇas tell us were used by the Pitarāḥ Somavantaḥ, the moon and snake worshippers, and before the Aryan year of three seasons, which is that which is best known to the authors of the Rigveda, and which is represented in the Vaiṣvadeva, Varunapraghāsūḥ, and the Sūkamedhāḥ sacrifices, which are the three annual seasonal sacrifices of the Brāhmaṇas as distinguished from the sacrifices to the five seasons made at the new and full moon festivals. When it is recollected that all these methods of reckoning time preceded the use of the

¹ Max Müller, preface to vol. iv. of his edition of the Rigveda, p. 38.

² See with reference to the mode of reckoning, and history of the ancient year, the Appendix to this essay, where the whole question is fully discussed.

³ *Ib.* p. 58.

solar year, which dates from about 4700 B.C., the lapse of time indicated by these successive changes appears almost bewildering, and yet the sacrificial ritual extends back to a time before the very earliest of these periods.

No attempt to make any approximate estimate of the length of time denoted by these changes, which does not realize the strength of ancient conservatism, can be in the least degree successful, as the ceremonies originally prescribed for the performance of any sacrifice were its most important part: any change in the rites could only have resulted from a great social revolution which it must have taken ages to accomplish. Throughout a country so immense as India changes were made very slowly, and successive changes such as those which I have already noticed, to which other instances will be added in the sequel, indicate great lapses of time, and these were probably exceeded by the length of time during which the older ceremonies, removed into the back-ground by successive innovations, were held to be so orthodox as to be of the first importance. In the eyes of the ancient ritualists an imperfectly performed and maimed sacrifice was if possible a greater insult to the deity to whom it was offered than its entire omission, and therefore only an extraordinary and unusual concurrence of circumstances, operating through long periods of time, could justify or secure the permanent acceptance of a change.

List of Subjects to be Discussed.

Throughout this essay I shall therefore show that the continuity of the sacrifices, of which I shall give ample evidence, proves both the very great antiquity of religious ceremonies and the very long periods through which India must have been ruled by the races who observed them, and who insisted on their observance throughout the length and breadth of the land. I shall further show that a careful study of the Brāhmanas discloses historical results which in the main coincide with those obtained by me from other data.

But what will be more generally interesting, and more valuable to readers who have not studied Indian history, will be what appears to me at least to be satisfactory proof that the evolution of religious thought in India, which I shall trace out in the sacrifices, agreed exactly, step for step, with that which can be shown to have taken place in other mythologies and theologies of Western Asia and Europe. This accumulative proof will add great force to the arguments I have already brought forward to prove that Indian, Asiatic, Egyptian, and European civilization all originated in the Euphrates valley; that it was the Sumero-Akkadian races, for the most part of Dravidian origin, living in that country, who laid the foundations of stable government, and added the most practically valuable parts of the superstructure; and that this same people originated both materialistic theology and the study of astronomy, undertaken with the object of regulating the proper times for the official sacrifices.

I shall also bring forward further evidence to show the part played by the Aryans and other races who entered India after Dravidian rule had been consolidated, and shall prove how in theology they first spiritualized the former materialistic conceptions, and afterwards made ethics, including a love of goodness for its own sake, as well as exterior morality a part of religion, though this most important branch of the subject can only be cursorily referred to from want of space.

In the more strictly historical parts of this essay I shall show reason to believe that there were two very early Dravidian immigrations into India, the first being that of the worshippers of the great mother earth and the moon goddess, and that these first immigrants were followed after a long lapse of time by the snake-worshippers. These combined tribes governed for a very long time the country which had been first organized under the control of the mother-worshippers, and divided the whole of the continent, from Cape Comorin on the south to the Himalayas in the north, into kingdoms which were for the most part governed according to a system based on Dravidian rules adapted to

a substructure of Kolarian land tenures. Their rule was superseded in the north perhaps by that of the fire-worshippers,¹ who were certainly the first recorded invaders from the north, who were called the Kuṣika, or the sons of Kuṣ. They were succeeded by the horse-taming and horse-worshipping Sākas, or Scythians, the worshippers of Indra, who were amalgamated with the Kuṣikas, but it was they who changed the worship of Indra, the god of the fertilizing waters, who was adored by the northern agricultural tribes who came down with or in the wake of the fire-worshippers, into the god Sukra, or Sakko, the warrior god of the Scythian races. They again were succeeded in the west by the Semite-Akkadian races, the Sauvira, and the cattle-herding and cow-worshipping Sākas, who introduced sun-worship and the solar year, and founded the numerous kingdoms ruled by the Ikshvāku race, of which the principal was that which had its capital at Sāketa in Ayodhya.

Before beginning to show how the evidence to be gathered from the Brāhmaṇas leads up to these conclusions, it will be desirable to set forth fully the origin and early significance of sacrifices, as a clear understanding of this part of the subject will help greatly in solving many of the problems which must be confronted in the course of the inquiry.

Early Meaning of Sacrifices.

In treatises on sacrifices they are usually divided into two classes, (1) Honorific, which consist of gifts given to secure the favour of the god or gods to whom they are offered, and (2) Piacular, or propitiatory offerings given to deprecate their anger.

¹ It seems to be doubtful whether the fire-worshippers actually conquered the moon-worshippers. The evidence seems rather to point to a joint government like that of the Northern and Southern Akkadians in the Euphrates valley. The fire-worshippers were apparently the race who introduced the year of thirteen lunar months into India, and who were in the Euphratean country the Northern Akkadian worshippers of the Akkadian deity called by the Semites Adar, who he is in the Zendavesta called Keresūpa, and his kingdom is represented as being in the land of Kabul, to the north-west of India. See Appendix.

But this division seems to me to be quite incomplete, as it excludes the earliest class of sacrifices, which is the most important of all to the historian, that in which the sacrifice is given as food to the god to whom it is offered.

In considering the subject it must be remembered that the earliest gods of all nations were probably local and totemistic deities. The local gods were probably the first gods of the forest agricultural tribes, and the totemistic gods seem to have been first worshipped among the pastoral or nomad races. Of these two tribes it seems that the forest tribes were the first to begin agriculture, and that they were joined later on by the pastoral tribes, who had emerged from the hunting stage to that of tending cattle.

The forest tribes, who were the first agriculturists, probably, like the forest tribes of India at the present day, began by clearing patches of forest land, which they tilled by hand-labour and occupied for about two seasons till the soil was exhausted. The trees they cleared away by burning. But the use of iron for cutting purposes began exceedingly early in India, and perhaps preceded that of bronze in other countries. Their agricultural implements were probably made of wood, like those recently exhumed at Kahun in Egypt, which date from the Twelfth Dynasty, or about 2600 B.C.¹ All the hoes, rakes and sickles found there are made of wood, and are precisely of the same form as the iron implements still used throughout the East. But with these wooden tools bronze knives and axes were also found, which were used to cut the wood, while the saws and hunting implements are made of flint.

¹ Among the workmen's appliances were two cubit measures, which I measured roughly, one somewhat over 25 inches, and the other about 18 inches. The larger cubit was divided into seven parts or palms, and the smaller into six. Both were apparently of foreign origin, the smaller cubit being about the length of the cubit of Asia Minor, 17·50, and the larger of the Persian cubit, 25·34. The workmen did not seem to use the cubit of 20·63, which is that of the early pyramid builders. If the workmen employed were foreigners, they probably came by sea from Asia Minor. These, of course, represent a state of society which existed in the Euphrates valley, India and Egypt many thousands of years before the date at which these deposits were accumulated.

The Gods of the Forest Tribes were Local Deities.

The savage, even in the nomad, and much more in the half-settled stage which marked the beginnings of agriculture, must have been continually oppressed with an abiding sense of the harm wrought by natural phenomena. These appeared to him to be the work of beings like but more powerful than himself, and more especially to be dreaded as invisible and intangible. When he had to repair the damages and guard against the dangers caused by floods, storms, lightnings, disease and accidents, his natural impulse was to ascribe the calamities, which destroyed the fruit of his labour, disturbed his peace and damaged his prospects of success, to beings who, though invisible, lived on the spot. He was naturally angry with his unknown enemies, but at the same time he feared their power and was anxious to have them on his side instead of against him. Hence arose the idea of keeping them in good humour, and the best way of doing this seemed to be to feed them.

It was therefore because the first sacrifices were given as food that sacrifices came to be considered the food of the gods, as they are said to be in the most ancient sacrificial manuals.¹

The Gods of the Pastoral Tribes were Totemistic.

When the first agricultural tribes were united with the pastoral cattle-herdsmen and ploughing was introduced, a new era arose. The new-comers brought with them a new class of gods. They were not oppressed with the same dread of local influences as troubled the forest races. Though they feared drought, and therefore sought countries watered by rivers, what they principally wanted was not deliverance from floods and storms, but increase of numbers to defend

¹ Sat. Brâh. i. 1. 1. 8 and 9, vol. xii. p. 6, and many other places. The same idea appears in the Bible, Levit. xxi. 17 and 22, where the sacrifice is called the bread of God, and also in Levit. iii. 11, where the peace-offering is called "the food of the offering made by fire unto the Lord."

themselves from their enemies, and of cattle to provide for the growing population.

The phenomena therefore which peculiarly impressed their minds were those of generation, and it was the unknown producers of the first living beings whom they regarded as gods. These became the gods of totemism, who were the reputed ancestors of the tribes by whom they were worshipped. They were the special tribal gods who, as is shown by Dr. Sayce in his account of the religion of the Akkadians, were regarded as "Dingirs," or Creators.¹ These gods, who were the products of a higher faith than those which were conceived by the fear of the forest savages, became the principal gods of the united tribes, while the local gods, except those adopted as ancestors, such as the rivers,² were relegated to a lower sphere.

It was a necessary condition of the prosperity of nomad, and afterwards of settled pastoral tribes, that they should be so numerous as to be able to defend their settlements, whether permanent or temporary, from other nomads in search of pasturage or places of fixed abode. For in open countries such as those in which they lived numbers furnished the only sufficient means of defence before walled fortresses were made.³ Therefore the addition of new members to the tribe was one of the first duties of creative ancestors. Hence the idea of duty was attached to the divine nature, and the gods were no longer regarded as merely capricious beings who must be kept in good humour by their votaries.

I have already in this series of papers shown that a strong sense of duty was always present to the Dravidian mind. It

¹ Sayce, Hibbert Lectures for 1887, p. 43.

² Thus Sarasvati, Idâ, and Mahi are river goddesses and ancestors in the Rig-veda, and "Tiber, father Tiber to whom the Romans pray," is another well-known instance of the deification of rivers. But rivers were first deified by the worshippers of the snake-god, who was the god called Hên by the Akkadians, and became in India Indra, the god of the sanctifying waters.

³ This increasing population required to be maintained, and the necessity of providing for their maintenance was one of the great stimulants to progress. It was thus that the early customs of infanticide, abortion, and sterilizing males, stated in the Zendavesta to be hateful to Ashi Vanguhi, the goddess who was patron of married women, were discontinued. Darmesteter's *Zendavesta*, *Ashi Yast* x. 54-59, *Sacred Books of the East*, vol. xxiii. pp. 280-281. The whole question is further discussed later on in this essay.

was to them what honour is to the Aryans. Every member of the body politic had to do his or her allotted part towards the maintenance of the prosperity of the tribe or state, and the gods, as ancestors or creators, were thought to be equally bound with their descendants by the obligations they had incurred by creating the tribe.

It was their duty and especial task to aid mankind in carrying out the precept to "increase and multiply," which was apparently the first command recognized as divine. It was by the aid of the tribal god that the tribe grew in numbers and their flocks and herds increased, and it was by the power exercised by the same god over the local deities that the fields of the united pastoral agriculturists produced the crops necessary to maintain the growing population and to feed the cattle when grass failed.

But the gods who had to perform these tasks required to be fed no less than those who were to be kept in good humour, for without food they could not have the strength to do their duty, and hence sacrifices continued to be offered to them as to the local gods as food.

We thus find that sacrifices were looked on as food for two reasons, one that they kept the local gods in good humour, and the other that they strengthened and nourished the tribal gods who were bound to provide for the prosperity of the tribe.

But this last of the two ways in which sacrifice was held to be food opened out a third view. It was thought that as the sacrificial food was an addition to the strength of the gods, that this food was therefore one of the factors in the production of new generations, and hence arose the belief that the sacrifice was a productive union of earthly and divine elements for the generation of offspring. This idea is continually set forth in the *Brāhmaṇas*.¹

¹ Sat. Brāh. i. 1. 1. 18, vol. xii. p. 9, and many other places. See especially Aitareya Brāhmaṇa iv. 2 and 3, Haug's translation, p. 327. note, for the description of the manner in which the Ajya (Goat) Shastra, Rig. iii. 13, should be recited, also the Pravargya and Gharma ceremonies, Ait. Brāh. i. 4. 18 and 22, Haug's translation, vol. ii. pp. 48-51. These are said to represent the cohabitation of the gods, and the production from the womb of Agni (the sacred fire) of a new and purer race of gods than the old lunar deities of the Asuras, or snake-worshippers.

In the description of certain selected sacrifices enjoined in the Brāhmaṇas which I am now about to undertake, it will be seen that religious ideas had, when these sacrifices were instituted, made a great advance from the crude materialism I have just described, and that the chief gods to whom the official sacrifices were offered were not the tribal fathers or ancestors, but the one mother and father of all things, and the god of time, who rules the seasons and measures the year. But the following analysis of the new and full moon sacrifices, which are among the oldest in the official catalogue, will show that these sacrifices were still considered the food of the gods, and that they were thought to be productive unions of pairs of sources of creative force, and similar results will be obtained by analyzing almost all the greater sacrifices in the Brāhmaṇas.

It will also be seen that these sacrifices are based on a year of five seasons, and they therefore trace back their origin to an era before time was reckoned by the full lunar year of thirteen months and by six seasons, and they must also be infinitely earlier as far as India is concerned than the Aryan year of three seasons.

New and Full Moon Sacrifices.

The new and full moon sacrifices, each of which are offered once in each lunar month, are preceded by five fore-offerings (Prayūgas). They are invitations asking the five deities who are invoked in the first four and the last verses of the Apri hymns of the Rigveda to attend the sacrifice. These Apri hymns are recited at the animal sacrifices, and the gods invited are (1) the Samidha or kindling-sticks, (2) Tanūnapat or Narūsama, (3) Idāh, (4) the Barhis, or sacrificial grass spread on the altar, and (5) the god called by the cry Svāhā.¹

All these passages set forth the doctrine of the sacrifice as a reproductive agent in its crudest and most materialistic form.

¹ Aitareya Brāh. ii. 1. 4, Haug's translation, vol. ii. p. 87; Śat. Brāh. i. 6. 3. 9-13, vol. xii. pp. 146, 148. For the meaning of the god of the Svāhā call, which is addressed to Agni Svishtakrit, see Śat. Brāh. i. 7. 3. 1-9, vol. xii. pp. 199-202, where it is shown that it was Rudra the phallic god who was thus summoned.

These five gods are said to represent the five seasons,¹ but it is necessary to look further so as to see the full meaning of each member of the group, and the full significance of the number five.

(1) *The Samidhs or kindling-sticks. The Spring.* These, the first in order of the five gods, are said to represent the spring. They are to be used in lighting the sacrificial fire, and are ordered to be applied to light the three enclosing sticks (paridhi) placed in a triangle round the firewood.² These enclosing sticks are explained to be the three former Agnis (fire-gods), who were struck down by the thunderbolt of Indra.³ They are (1) the Lord of the earth, (2) the Lord of the universe, and (3) the Lord of living beings,⁴ or the old triad of the mother earth, the phallic god, the father, and the vital power animating both. They are kindled by the two Samidhs, which are the Svastika, or fire-sticks, which, when rubbed together, produce the flame. They are said to represent the heavenly and the earthly fire. With the first the priest kindles the middle enclosing stick at the base of the triangle, which represents the vital and creative power which animates both the mother earth and the universal father and binds them together. He then kindles with it the fire materials which the triangle encloses.⁵ He thus kindles the three former supreme gods and the sacred central fire, the emblem of the divine power of the latent heat, the creative force of which was greater than that of the old gods. With the second Samidh, or the earthly fire, which he puts on the burning firewood, he kindles the spring, and with it the whole productive year.⁶ The functions of the Samidhs, which I have expressed in terms taken from the *Śatapatha Brāhmaṇa*, clearly represent the vivifying power of heat, which kindles into life the old generating gods of the

¹ Śat. Brāh. i. 5. 2. 1, vol. xii. p. 144.

² Śat. Brāh. i. 3. 3. 13 and 14, vol. xii. pp. 87-88.

³ Śat. Brāh. i. 3. 3. 14 and 15, vol. xii. p. 88. They were only fire-gods in a metaphorical sense, as representing the differing forms of the creative impulse. They were not originally fire-gods at all.

⁴ Śat. Brāh. i. 3. 3. 17, vol. xii. p. 89.

⁵ Śat. Brāh. i. 3. 4. 5, vol. xii. p. 91.

⁶ Śat. Brāh. i. 3. 3. 7, vol. xii. p. 92.

popular triad, and these, when they receive the requisite impulse from the animating heat, kindle the earth into life in the spring. It is not from earthly food that they receive their strength, as in the old materialistic religion, but from the quickening power of the sacred flame. In other words, the Samidhs are the productive pair which represent the union of heaven and earth under heavenly influences, and the summons to the Samidhs to partake of the sacrificial feast and to bless the sacrifice, is said to be a victory of the gods over the Asuras, to whom the seasons formerly belonged.¹

This means that the life-giving power which was formerly ascribed to the old lunar and anthropomorphic gods of the Asuras was, under the more spiritualistic religion of the fire-worshippers, transferred to the divine heat, while the inclusion of the three former Agnis shows that they who were the gods of the Dravidian Akkadians, or of the people called in the Mahābhārata Virāta, worshippers of the phallus or snake, and of the votaries of the moon and mother earth, were still included in the sacrifice in which the fire-god took the first place.²

In this sacrifice, as I shall show when proving that the first three gods represent the triad consisting of heaven and earth as the productive, and the moon-god as the creative power, the Samidhs represent the heaven, which takes the place of the phallic god, the father of all things, in the earlier triad. When associated with Agni the fire-god, the phallic father takes a subordinate place among the three Agnis, but he is also directly summoned, as I shall show later on, as Rudra, the god who is said to have been at first excluded from the sacrifice, but afterwards admitted to a chief place.

(2) *Tanūnapāt. The Summer.* This god is said in the Śatapatha Brāhmaṇa to represent the summer.³ The word

¹ Śat. Brāh. i. 5. 3. 9, vol. xii. pp. 146-147.

² See Part II. of this Series, Journal of the Royal Asiatic Society for April, 1889, pp. 212, 298, also p. 265, note 2, where I have shown that the tribes called Asuras in the Brāhmaṇas, from Asuri, Akkadian for 'chief,' are those known in the Mahābhārata as Virāta.

³ Śat. Brāh. i. 5. 3. 10, vol. xii. p. 147.

is said by Böhrtlingk-Roth to mean offspring, and is interpreted as "the heavenly fire offspring of himself," i.e. as the self-created. In considering who was the actual deity represented under this mystical name it must be remembered that these five seasonal gods were addressed in the *Apri* hymns of the *Rigveda* which were recited at the animal sacrifice.¹ These were essentially non-Aryan sacrifices, and among other proofs of this may be cited the fact that while the fire to be used in the sacrifice is being carried round, the priest recites the first three verses of the hymn *Rig. iv. 15*, in which the fire is said to be that of the *Sṛjaya* chief, *Devavata's* son.² I have shown further that this probably is the *Sṛjaya* chief who is said in the *Śatapatha Brāhmaṇa* to have been made into an Aryan by the ceremony of initiation.³ Therefore not only was the sacrifice unhallowed according to Aryan ideas, but the fire that took the sweet savour of the sacrifice up to heaven was not the sacred fire of the Aryans, but the less pure fire of the *Asuras*. Consequently none of the gods invoked in this sacrifice were originally pure Aryan gods.

In the stanzas of the *Apri* hymns addressed to *Tanūnapāt* he is sometimes called *Narāṣaṃsa* (beloved of men). In two hymns, *Rig. i. 13. 2* and *3*, and *i. 142. 2* and *3*, both *Tanūnapāt* and *Narāṣaṃsa* are each summoned in a separate stanza as if they were different deities, and in the last of these two hymns, in *v. 4*, *Indra* is called among the *Agnis* or fire-gods, so that there are in *Rig. i. 13* twelve, and in *i. 142* thirteen stanzas instead of eleven, the proper number for an *Apri* hymn. All the other *Apri* hymns have only eleven stanzas, and in these the god invoked in *Rig. i. 188. 2*, *iii. 4. 2*, *ix. 5. 2*, and *x. 110. 2*, is *Tanūnapāt*, while in *Rig. ii. 3. 2*, *v. 5. 2*, *vii. 2. 2*, and *x. 70. 2* it is *Narāṣaṃsa*.

Among these *Rig. ii. 3. 2* and *ix. 5. 2* are the most noteworthy. In the first *Narāṣaṃsa* is addressed as the god who adorns all places and casts his light through the three heavens. The god here addressed seems to be the moon-

¹ *Alt. Brāh. ii. 1. 4*, Haug's translation, vol. ii. p. 81.

² *JA. ii. 1. 5*, p. 84.

³ Part II. *J.R.A.S.* April, 1889, pp. 300 and 329.

god, who shines, unlike the sun, both in the day and in the night, but this stanza has a farther mystical meaning, and seems to speak of the moon-god as the impulse (*muni*) which gives life to the three heavens, the earth, the air, and the sky.¹ This meaning is clearly proved by the last two lines of the stanza, which represent him as sprinkling the life-giving fat over the offering and the gods. This fat is explained in the *Brāhmaṇas* to be like the sacrificial butter, the divine sap which binds heaven and earth together, and gives life to all things.² The fat or butter is, as I shall show later on, only offered to the *Asura* gods, and therefore *Narāyaṇa*, the god invoked in this stanza, must belong to the old triad.

In *Rig. ix. 5. 2*, where *Tanūnapāt* is called "the rippling one who flies through the wide heavens wetting his horns," it seems to be impossible not to think that it is the moon-god who is invoked. In this hymn the god summoned as *Tanūnapāt* cannot possibly be the sun-god, as in stanza 11 of the same hymn the sun-god is named as summoned by *Agni* with those called last to the sacrifice. He could not be called twice, once as a follower of *Agni*, when he had been before called as an independent god, nor could the horns which are wetted be those of the fire-stick, which is represented as a trident, the centre prong being the fire-stick, as it does not fly through the wide heavens. The god invoked must therefore be the moon-god, but not the moon-god of the phallus-worshippers, but the purified moon-god of the *Indra*-worshippers. *Indra* is derived from *Indu* (drop, sap), and means the god of the life-giving waters who guards the *Amrita*, or waters of immortality. This will be fully explained later on when I come to speak of the myth of *Manu*. To the writer of this hymn it seemed that the moon-god

¹ *Sat. Brāh. ii. 5. 1. 10*, vol. xii. p. 396, where *Savitri* the sun-god is called the impeller, i.e. the impulse of the gods. This was the part assigned to the moon-god in the early lunar triad.

² *Sat. Brāh. i. 5. 3. 10*, and *ii. 4. 3. 10*, vol. xii. pp. 149 and 372. In this metaphor creation is regarded as a tree whose top is in heaven and whose roots are in earth, and it is the sap which connects them together. It is the same metaphor as that embodied in the sacred *Yggdrasil*, the world tree of the northern *Eddas*.

derived his power from wetting his horns in the Amrita or creative waters of heaven, and it was the god who was thus invested with creative force whom he summoned.

It is hardly necessary to consider which of these two terms for the creative and self-creating spirit is the oldest. But to judge from the meaning, *Tanūnapāt*, the self-created one, is the more mystical and abstract, and therefore probably the newer term. *Narāsaṃsa* (beloved of men) would seem to have been used as an epithet of the moon-god before the crowding metaphysical conceptions of an age of active theological thought had rendered the adoption of a more comprehensive name for the supreme deity necessary. Both seem to have meant the moon-god as the visible representation of life-giving energy and the uniting bond both of the earlier and later creative triad.

That *Narāsaṃsa* represented the older gods who were relegated to a lower sphere when the fire-god, Indra, and the sun-god successively became the chief of the gods, is shown by the way in which he is spoken of in the ritual for the *Anuyāja* or after-offerings. These succeed the chief oblations, as the *Prayājas* or fore-offerings preceded them.¹ They are made to three gods, (1) the *Barhis* or sacred grass covering the altar, which is said to represent the earth and the plants on it, (2) *Narāsaṃsa*, the air, and (3) *Agni*. This is evidently another form of the triad (1) earth, (2) the moon-god, who was subsequently displaced by Indra, the god of the atmospheric region, the *Hea*, or water snake-god of the *Akkadians*, and (3) the god of the fire-stick, who, to the fire-worshippers, took the place of the phallic god, the materialistic father of all beings. But in a subsequent paragraph they are declared not to be gods,² that is to say, they were, as I have shown, the gods of an older theology. I have shown in Part II.³ of this series of essays that the chief god of the summer solstice, who is called to come to this sacrifice as *Narāsaṃsa*, is the moon-god, and

¹ *Sat. Brāh.* i. 8. 2. 10-13, vol. xii. pp. 233, 234.

² *Sat. Brāh.* i. 8. 2. 15, vol. xii. p. 235.

³ *J.R.A.S.* April, 1889, p. 322.

there can therefore, it seems to me, be no doubt that the god typified in *Narāyaṇa* and *Tanūnapāt* is the vital energy of which the moon-god was held to be the visible sign and type in the two earlier triads. The first consisting of (1) the All-father, the phallic god, (2) the moon-god, and (3) the earth, and the second in which the heaven took the place of the All-father. But by the time these hymns were written the central power had been ascribed not only to the moon-god, but also to the god of latent heat and the god of the water of life, and it was because it had been traced to these different sources that the Vedic poets called it by the name *Tanūnapāt*, the self-created, which expressed the inner meaning which underlay all the visible signs of this great and mysterious power.

It will be shown later on, when I come to speak of the *Vaiṣvadeva* sacrifice, that there is a further and most interesting question as to the nature of the moon-god to be discussed, as to whether it was male or female. I shall show that it most probably originally represented the feminine power which gave life to the mother earth and her offspring.

(3) *Idāḥ*. *The Rains*. The next deity summoned is said to represent the rainy season. It is said to have been taken by the gods from their rivals and predecessors the *Asuras*. The word *Idāḥ* here used is the plural of *Īdā*, the name of the universal mother said to have been formed by *Manu* (meaning the thinker) out of the waters which were impregnated with the heavenly seed.¹ In the mythic story in the *Śatapatha Brāhmaṇa* *Manu*, the thinker, when he found himself alone in the world, after all the rest of mankind had been drowned in the flood, threw into the waters clarified butter (*ghee*), sour milk, whey and curds, and from the water in which this seed was sown *Īdā*, the universal mother, arose after a year. This clarified butter is the offering made to the butter-drinking gods, who are described in the *Śatapatha Brāhmaṇa* as the older gods, to whom the fore-offerings (*prayājas*) were given.² They are said in another place to be

¹ *Sat. Brāh.* i. 8. 1. 7-9, vol. xii. pp. 218-219.

² *Sat. Brāh.* i. 5. 3. 23, vol. xii. p. 151.

the heaven and earth, the butter being the sap that makes them fruitful.¹ Sour and sweet milk, whey and curds, are the ingredients of the Sannaya sacrifice, which is that specially offered to Indra,² the god of the fertilizing waters and storms, who by his thunderbolt overthrew the three former Agnis.³ According to this myth *Īdā*, the mother earth, is not the divine mother of the phallic worshippers, who is called in *Brāhmanas* and the *Mahābhārata* *Kadrū*, the mother of snakes,⁴ but the purified earth which has been cleansed by the sanctifying waters and raised again to be the home of a new and more holy race who worshipped the spiritual gods, and not the sensual materialistic deities of an earlier time. The whole story of the flood is thus seen to be another form of the Indra myth, showing how the snake-worshippers and their creed were destroyed by Indra.⁵ It was therefore clearly conceived after Indra became the chief god, but it probably originated in Assyria, where *Hea*, the fish god and water snake, who, according to the Chaldean *Genesis*, and the story in the *Mahābhārata*, ordered the building of the ark,⁶ was the god who determined on the destruction of the wicked race of snake-worshippers. He is the horned fish which in the story in the *Satapatha Brāhmaṇa* drags the ark to the mountains, and the horns connect him with the gazelle sacred to *Mul-lil*, the Akkadian god of storms, who was originally the lord (*mul*) of the dust (*lil*), that is, the husband of the earth, the phallic father or great snake. He afterwards became the god *Hea*, who in his later form was the counterpart of the Hindu *Indra*, the

¹ *Sat. Brāh.* ii. 4. 3. 8-10, vol. xii. p. 372.

² *Sat. Brāh.* i. 6. 4. 8-9, vol. xii. p. 177.

³ *Sat. Brāh.* i. 2. 3. 14, vol. xii. p. 88.

⁴ *Sat. Brāh.* iii. 6. 2. 2, vol. xxvi. p. 149; *Mahābhārata*, *Ādi Parva*, ix.-xiii.

⁵ This is expressed in a somewhat different form with the same meaning in a quotation made by Dr. Sayce from an Akkadian mythological document which says: "The heaven was made from the waters. The god and goddess create the earth." According to this cosmogony the waters were the mother of all things. Afterwards water became the father. Sayce, *Hibbert Lectures for 1887*, p. 376.

⁶ Sayce, *Chaldean Account of Genesis*, chap. xvi. p. 280. *Mahābhārata*, *Vana* (Markandeya Samāya) Parva, clixvii. pp. 552-556. Here the god is the sacred fish nurtured by Manu (the thinker), showing that the fish-god was a conception worked out by thought. The *Mahābhārata* fish-god only warned Manu of the destruction coming, and advised him to build a large ark furnished with a rope, in which Manu and the seven Rishis were saved. He did not order the flood.

god of the atmospheric region, before he was changed into the warrior god of the Sākas or Seythians.

The word *Idāḥ* in the plural, which is used in the ritual of the sacrifice to the seasons, apparently means the two *Idās* who, as male and female, were the ancestors of Nabusha, the great serpent, the father of the royal families of the snake race.¹ This snake race is the black race,² which is said in *Rig. i. 130. 8*, to be descended from *Manu*, and this shows that the myth which makes *Manu* the thinker the father of *Idā*, the mother earth purified by the sanctifying waters, is much older than the *Rigveda*. In the *Idū*, or *Iḷā*, stanzas of the *Apri* hymns *Agni* is, in *Rig. i. 13. 4*, *i. 188. 3*, *x. 70. 3*, and *x. 110. 3*, called on as the agent or messenger of the gods to bring them all to the sacrifice, no names being specified. In *Rig. i. 142. 4*, and *v. 5. 3*, *Agni* is called on to bring *Indra*, and in *ii. 3. 3* the *Maruta*, whom *Indra* loves. But the most noteworthy stanzas are those in *Rig. vii. 2. 3*, and *ix. 5. 3*. In the first the god summoned is the messenger of both worlds who speaks the truth, whom *Agni* allows us to honour by offerings after *Manu*'s fashion. This is a clear reference to the *Idā* of *Manu*, the mother of all things, created by the thought of the creator. In *Rig. ix. 5. 3* the god invoked is "the rippling light, which shines as a bright treasure in the stream of the swift drink." The theological change which made intoxicating drink a creative agent will be more fully considered further on when I come to speak of the *Soma* sacrifice. Here I will merely say that this invocation, like the summoning of *Indra* and the raising of *Idā* from the waters, marks a further stage which was reached in the evolution of speculative inquiry when the divine drink succeeded the waters as the emblem and manifestation of the creative spirit. As for the *Maruta* summoned in *Rig. ii. 3. 3* they are, as I have proved before in these essays, the *Nakshatras*, or phases of the moon. They are the daughters of *Dakṣha*, the physical generative power, and belong, like the butter and fat drinking gods who are spoken

¹ *Mahābhārata*, *Adi (Sambhava) Parva*, *lxiv. p. 230*.

² *Tvacaṁ kṛṣhṇām*, *Zimmer*, *Altindisches Leben*, p. 113.

of in stanza 2 of the same hymn, to the older gods of the snake-worshippers. They are not related to the purified Idā, but are the daughters of the older mother earth called Kadrū, the mother of snakes. It will be shown later on that they are said to be dear to Indra, because Indra, the god of the atmospheric region, is the son of the same mother. We thus find that in these invocations the first three seasons represent (1) the heavens, which kindle the earth into life by the help of the divine fire, (2) the vital self-created energy, which creates and has created all things, and controls the moon, the gods of time, and all natural changes, and (3) the mother earth, but not the original mother, but the earth purified by the waters. Thus we have a new earth and a new heaven, which has taken new life from the divine power of the fire-god, and a deeper significance is also given to the central ruling power than that attributed to it by the materialistic snake-worshippers. The three seasons represent the old triad under a new form.

(4) *The Barhis or Sacrificial Grass. The Autumn.* In the triad which we have just considered we find two most important gods left out. They are the earth, the mother of the snake-gods, called Kadrū, and the materialized father of all beings. They were looked on by the Indra worshippers who revised the ritual as inferior deities. But though denied precedence they were not altogether omitted, nor deprived of the sacrifices which were their due, and it is they who are called last to the sacrifice. The fourth invocation to the Barhis, representing the autumnal seed time following the rains, brings out, even more clearly than the first three invocations, the idea that the principal duty of the ruling god or gods was to secure the natural replenishment of losses by decay and death, by the reproduction of young and fresh life.

Most of the stanzas of the Aprī hymns addressed to the Barhis call for little remark, as they are merely invocations to the sacred grass; but the Barhi verses in Rg. i. 13. 5, ii. 3. 4, and vii. 2. 4, which describe the grass as "fat-besprinkled," give evidence of the inner meaning of the sacrifice. I have already shown that in the Vedic sacrifices

and those of the Brāhmaṇas the butter or fat is the seed or divine sap which binds earth and heaven together, as parts of one great organism. And it is after the rains of early autumn have called to the fuller life of seed-time the plants which had been sown in the spring and developed in the summer, that these same plants shed their seed into the ground to await the resurrection of the coming year. Therefore the Barhis or sacred grass are summoned to the sacrifice as representing the seed sown on the altar, which is the consecrated ground personifying the divine mother earth.¹ The Barhis, therefore, represented the earth as impregnated with seed, and it is said to mean the earth in the ritual of Anu-yaja or after-offerings.²

This sacrifice was originally the sacrifice to the mother earth, and the reformers of the ritual improved it by making it the sacrifice to the earth bearing seed. It will be shown afterwards that the sacrifice to the fathers and mothers which corresponds to this always took place in the autumn. Thus the time when the year sows the seed of future generations was held to be that when honours should be paid to the fathers and mothers who brought into the world the ancestors of those now living.

(5) *The Agni Ścishtakrit or Rudra. The Winter.* But though the seeds, from which the plants of the future years are to grow, are in the Barhi sacrifice sown in the sacred ground, they cannot start into life in the spring unless they are vivified by the quickening power which is the author of all living existence. This power is represented by the winter season. The god summoned is he who is by the later ritualists of the Brāhmaṇas looked on as the chief representative of the butter-drinking gods, to whom sacrifices are offered by libations of butter,³ instead of the older animal sacrifices which were by the reformers held to be impure. To purge themselves of the guilt of these animal sacrifices without defrauding the gods to whom they were offered of

¹ Śat. Brāh. III. 7. 2. 1, vol. xxvi. p. 175.

² Śat. Brāh. I. 8. 2. 11, vol. xii. p. 233.

³ Śat. Brāh. I. 5. 3. 23, vol. xii. p. 151.

their dues, the ritualists of the Indra period, by what must have been thought to be a most daring innovation, substituted for the animal offerings rice cakes and grain offerings, and thus they fed the gods without committing the sin of destroying life.¹ The elaborate explanation of the meaning of Agni Svishtakrit given in the section devoted to that deity in the Śatapatha Brāhmaṇa shows that the chief of the old butter-drinking gods was Rudra, the phallic deity, father of the Maruts, who were the Nakshatras, or phases of the moon, and the husband of the universal mother.² He is the Dakṣa (power) of the Mahābhārata, the father of fifty gods who were his daughters, the mothers of time and mortal men, the active material power who was in the eyes of the phallus-worshippers the supreme divinity. The divergence of view between these materialists and those who ascribed the vital creative power to the divine heat or the fertilizing water is shown in the substitution of the term "Muni" for "Dakṣa," as denoting the efficient cause of all things. "Muni" is the creative impulse,³ the life-giving spirit which touched and permeated the germs ready when awakened by the in-rushing life to rise from death, grow, bud, blossom, and again transmit their immortal but sleeping vitality to the seed whence new generations are to arise. It is the old story of the sleeping beauty kissed into waking life by the destined prince, and it is he who in the Manu myth becomes the thinker. It is this divergence of view which explains the substitution of Muni for Dakṣa as the central power in the names of the last three months of the Hindu lunar year.⁴

In the Śatapatha Brāhmaṇa Rudra is described as the god of cattle who was left behind and excluded from the sacrifice when the gods went to heaven, or, in other words, when the gods were looked on as heavenly, and not as earthly powers. He attacked them for their neglect of his claims, and to

¹ Śat. Brāh. i. 2. 3. 8, vol. xii. p. 51.

² Śat. Brāh. i. 7. 3. 1-9, vol. xii. pp. 199-201.

³ Böttlingk-Roth interpret "muni," as "impulse."

⁴ Part III. Journ. Roy. Asiatic Soc. July, 1889, p. 554. I there said that I thought Muni was the older form. It is from studying the history of the evolution of religious thought that I have come to see that this was a mistake.

pacify him the gods allowed him as his peculiar oblation the butter sprinkled on the sacrificial dishes.

The last stanza of each of the Aprī hymns is addressed to Agni Svishtakrit or Rudra. He is called to bring Indra, the Maruts, and Varuna in Rg. v. 5. 11, and x. 70. 11. In Rg. i. 142. 12 and 13 Vayu and Pūshan are added to these three. In Rg. i. 13. 12 only Indra is called. In Rg. ix. 5. 11 the wind-god, Bṛhaspati (the lord of prayer), the sun-god, Agni and Varuna, are called. In Rg. i. 188. 11, Agni is called to bring the gods without any being mentioned. In Rg. iii. 4. 11, and vii. 2. 11, the kindled Agni united with Indra, as the strong gods, are asked to come and sit on the sacred grass with Āditi, the mother, and in Rg. ii. 3. 11, the god who lives on butter is called to come.

In all these hymns the supreme god of the later sun-worshippers is only invoked once by name in Rg. ix. 5. 11, and then only through Agni. In the others Indra and Agni, who, in the minds of the Vedic poets, disputed the supremacy with the later sun-god and the earlier Varuna, occupy the most prominent place. In Rg. i. 142. 13, Rudra is invoked under his other name of Pūshan,¹ and the god who lives on butter of Rg. ii. 3. 11, and the Maruts who are his children, are merely Rudra under other forms. That Rudra was a phallic deity is fully proved by the ritual of the spit-ox sacrificed to him as described in the Grihya Sūtras. This ox is offered not only to Rudra, but also to the serpents, which proves the phallic character of the sacrifice.² Also Rudra in the two rituals of the Āyvalayana and Pārasara Grihya Sūtras, as well as in the Śatapatha Brāhmaṇa, is called among other names Mahādeva, or the great god. He

¹ The identity of Rudra with Pūshan is also shown by both being the god of cattle, Śat. Brāh. i. 7. 3. 8, vol. xii. p. 201; iii. 1. 4. 9 and 14, vol. xvi. pp. 22 and 23. Pūshan, whose name is preserved in the month Push or Pōos, seems to be the older form.

² Āyval. Grih. iv. 8 and Pāras. Grih. Sūtras iii. 8, pp. 255-259 and 351-353, vol. xix. Sacred Books of the East, Prof. Oldenberg's translation. In the list of Rudra's names in the Āyval. Grih. Sūtra iv. 8. 19, p. 256, Śankara, the name given to Śiva in the Mahābhārata, occurs in the same place in the list as that of Mahādeva in the Pāras. Grih. iii. 8. 6, p. 352, showing the identity of Śiva and Rudra. And the liṅga, which is the symbol of Śiva, leaves no doubt of his being a phallic god.

is also said in one place in the Śatapatha Brāhmaṇa to be Prajāpati, the moon,¹ while in another Prajāpati is said to be Agni and Soma,² that is, to combine the functions of the fire-god and the moon-god. In other words Rudra represents the dominant and creative vital energy in its male form, and the mother earth is the same power in its female manifestation, while in the deification of the moon-god the power of giving life was ascribed to heavenly influences, and in that of Agni to the divine heat.

That the sacrifice of the spit-ox was a relic of lunar worship is shown by the directions as to the colour of the ox which was to be chosen for the offerings. It was to be black with white spots, like the Egyptian sacred bull Apis, and therefore it was the animal sacred to the moon, and represented it as lighting up the darkness of the night.

The whole of this analysis of the fore-offerings to the seasons shows that the sacrifice was looked on as the food of the gods, and that, as in the myth of Idā, who was the offspring of the sacrifice to the waters, and in the symbolical significance of each stage, it was thought to be one of the factors in the act of creation and reproduction.³

But this analysis also proves what is far more important, that the ritual as set forth in the Brāhmaṇas is a complete compendium of early theological beliefs, and shows that those who worshipped the later gods used to propitiate those who had been first revered in almost forgotten ages.

The stages of belief set forth in the ritual now analysed are as follows:

I. *The Sacrifice to the Mother Earth.*

The first sacrifice offered was to the mother earth, but this, as will be shown later on, did not take place on consecrated ground. Ritualism began with the hallowing of the ground on which the sacrifice was offered, and the altar which was

¹ Śat. Brāh. vi. 1. 3. 7, Mnir, Early Sanskrit Texts, vol. iv. pp. 329 seqq.

² Śat. Brāh. i. 6. 1. 20, vol. xii. p. 159.

³ Śat. Brāh. i. 8. 1. 30-35, vol. xii. p. 226, where the object of the sacrifice is said to be the production of offspring and cattle for the sacrificer.

then heaped up became to the first materialists the symbol of the sacred mother. In the Śatapatha Brāhmaṇa the altar is not only said to be the earth,¹ but also the earth as the woman from whom all things are born,² in other words, the mother earth. The altar prescribed in the Brāhmaṇas was an altar of earth, and elaborate directions are given, as will be shown later on, as to its dimensions; and the original altar among the Jews was also of earth.³ The blood of the victim, which was poured forth on the ground, was the food requisite to supply the strength, without which the offspring created by her own inherent creative force could not be produced; and it is this sacrifice which is represented in the Barhis; the melted butter sprinkled on the seeding-grass being the substitute for the original libations of blood.

II. *The Sacrifice to the All-Father, the Male or Snake-God.*

To this original worship of the mother-earth was added that of the male element, which was thought to embody the material power (Dakṣa) necessary for the work of production, and this power is invoked in the Agni Svishtakṛit or Rudra.

III. *The Sacrifice to the Power Animating the Male and Female Principle.*

But neither the earliest theological generalization, which ascribed the creation of all things to the mother-earth, nor the subsequent union of the two material creative powers, was thought by subsequent inquirers to be a sufficient explanation of the mystery of creation and reproduction. Consequently the power animating the two active agents was separated from them and made a third god, controlling and giving life to the other two. And this power was originally represented in the Iḍaḥ male and female, which are still worshipped as the Virāj, the male and female principle

¹ Śat. Brāh. i. 2. 5. 7, vol. xii. p. 60; iii. 7. 2. 1, vol. xvi. p. 175.

² Śat. Brāh. i. 2. 5. 15, vol. xii. p. 63; iii. 5. 1. 11, vol. xvi. p. 113.

³ Exod. xx. 4.

united by the statue makers in one image known as Śiva-Parvatī or Śiva-Durgā.¹ This bisexual god was the head of the original triad, and represented the material reproductive force. But this creative and reproductive force was at a very early period transferred to the moon, when the moon was adopted as the measurer of time, and became the dominant god of the earliest period of time measured by months, the ten lunar months of gestation. It was from her that all reproductive elements derived their power, and hence Soma, the moon goddess, took the first place in the triad as the power animating the two materialistic deities.

IV. *The Later Triad.*

The earliest triad after the first revision, by which the moon-goddess was made the ruling power, underwent several successive changes. The first appears to be that which substituted Agni or the god of the fire-stick (Swastika) for the male god, and according to this innovation it was he who was the author of the divine heat, which was the efficient cause of life both in heaven and in earth. This was apparently the doctrine of the race of handicraftsmen and workers in metal, who, as I have shown in the Appendix, were the race who first used the full lunar year of thirteen months. They were the sons of Kasyapa, and are called in the Mahābhārata the Kuśikas. But besides this original Agni or fire-god, who was also the Uras² of the Northern Akkadians, there was another Agni, who was the god spoken of in the Rīgveda as the messenger and agent of Varuna. He was the fire-god of the northern tribes of Aryan descent. It is this last Agni, united with the older god, who appears in the invocations to the seasons as the Samidha or kindling-sticks. Subsequent to these changes, and to the substitution of Varuna the heaven for the male-god, there came the great revolution caused by Indra worship. In the Śatapatha Brāhmaṇa it is Indra who, as Tritu the Āptya or god of the

¹ This is shown in the bas-relief of the Virāj in the caves of Elephanta.

² This was the god known to the Semite-Akkadians as Adar (Sayce, Hibbert Lectures for 1887, p. 151).

waters, killed Visvarūpa, the three-headed son of Tvashtri,¹ and in the Zendavesta it is Thraētaona who killed Aži Dahāka the three-mouthed snake,² and the malignant power destroyed in both cases is the materialistic triad. It was the worship of Indra which changed the whole aspect under which nature had hitherto been regarded, and which made the fertilizing waters the central power which united heaven and earth, the father and mother of all things, and made them both fruitful.

I have shown how the working of this change is shown in the myth of Manu and Idā, and it seems to have gone further than the substitution of a new creative agency for the old materialistic god, for under the influence of the Indra-worshippers the moon-goddess was deposed from her place as the measurer of time. The proof of this is to be found in the fact that Sakko, the Pali vernacular name for Indra, is the god placed at the head of the thirty-three gods of the Tāvatisma heaven, whom I have shown to be the ruling gods of the lunar year.³ The worship of Indra in its turn succumbed to that of Vāsuki, or Vishnu; but in this change it was Vishnu who was substituted for Varuna as the third person in the triad, while Śiva reappeared as the phallic god at its head.⁴ In this triad the ruling god was Pushkara, the moon, meaning the divine lotus, or the mother of the earth resting on the sanctifying waters, and the lotus appears in the Mahābhārata as a symbol of Indra, who gives to the god Vasu, king of Chedi, a garland of unfading

¹ Śat. Brāh. i. 2. 3. 2, vol. xii. p. 47, note 3. Visvarūpa means of material form, and denotes the materialistic gods.

² Abān Yasst ix. 34, Sacred Books of the East, Darmesteter's translation, vol. xxiii. p. 61.

³ Childers, Pāli Diet., s.v. Tāvatisma; Part II. of the series, J.R.A.S. April, 1889, p. 302, note 4. But Sakko here may mean Indra, as the old phallic god who undoubtedly ruled the earliest year of the thirty-three gods, that of lunar months of twenty-eight days, and the five seasons.

⁴ The name Śiva does not appear in the early sacred writings, where the only name like it is Sankara. It is possible that the name may be that of Saiva or Śaiv, the protecting deity of the Northern Finns, which Castrén says is "ein allgemeines Göther-epithet," and if so, Śiva, like horse-worship, would be one of the numerous importations of the Sámas, which will be noticed further on. See Etruscan Inscriptions of Lemnos, by R. Brown, jun., p. 23, published in the Proceedings of the Society of Biblical Archaeology, April, 1888.

lotuses.¹ We thus see that the popular "trimurti" contains in itself an epitome of the successive phases of religious belief. It was the varying aspects of the mystery of creation which led the religious thinkers of the Veda first to place the ruler of heaven and earth apart, as Tanūnapāt, the self-created, and afterwards to make him the loving father of men as Brihaspati, the lord of prayer.

I will now proceed to show in fuller detail that this succession of beliefs represents the actual historical sequence of religious speculation, and will begin by inquiring into the history of the worship of the divine mother.

The Worship of Mother Earth.

I have already shown in Part III. of this series of papers that in the Tamil year Tai, the mother, occupies the place assigned to Pūshan, or Poos, in the list of Hindi months.² Thus, according to the ancient calendar, while Rudra, or Śankara, ruled the close of the year,³ the beginning of the new year was sacred to Tai, the mother. The change which made over to Pūshan, the male god, the month once sacred to the self-created and creating mother was made when the male element, which was disregarded in the original view of creation, was exalted above the female. This change seems to have originated both in the Euphrates valley and in Northern India among the worshippers of Hea, the water-snake-god, who represented the deification of the water of life among the Sumero-Akkadians. These were the people called in India the Haihayas, a name which, as I shall show

¹ Mahābhārata, Ādi (Sambhava) Parva, lxiii. p. 172.

² J.R.A.S. July, 1889, p. 281. But the Tamil Tai also appears in the names of the months and Nakshatras in the Taittirīya Brāhmaṇa, i. 5. 1-2. Preface to Max Müller's edition of Rigveda, vol. iv. pp. 34-35, where Tishya is given as the name of the Nakshatra Pushya, and Taishah as that of the month Paushah or Pūsh.

³ Part II. of this series of papers, J.R.A.S. April, 1889, p. 320. It may here be noted that though none of the names of Śiva appear in those of the last month of the year, he really appears under a much older form. The month before Pūsh is Marga in Tamil, and Mrigasirsha in Hindi. The name means the deer-headed god: this was the gazelle which was sacred to Mul-lil, the original Akkadian moon-god of the phallic triad. It was the sacred gazelle who became the ram, the successor to the Tamil or Dravidian goat, in the signs of the Zodiac, and who became in India Pūshan, Rudra, Śankara, and Śiva.

fully later on, means the sons of Hea; and Pūshan was, as I shall also show, the form under which the phallic god was especially worshipped by those who looked on Indra, or the god of the fertilizing rains, as the chief god. Their rule does not seem to have extended south of the Godavery, and hence the original Tamil name of the month meaning the mother was preserved in the south, and Pūshan substituted for it in the north. The ancient reverence paid in Northern India to the great mother is still shown in the Hindu festivals of the 3rd of Mrigasirsha, 3rd of Māgh, and the 3rd of Baisakh. All these are in honour of the goddess who under various names represents the mother earth, but the greatest of all these festivals is the Durgapūja held in Bengal on the 7th day of the lunar month Assin (Āsvayajā).¹ In the myth of Manu, to which I have already referred, Idā, when she rose from the waters, is said to have been claimed by Mitra-Varuna, the moon-goddess and heaven, as their daughter; but she would not acknowledge them as her parents, and remained constant to her real father, Manu the thinker. In other words, she owed her origin to no material parentage, but, like the Greek goddess Athēnē, who sprang armed from the head of Zeus, she was born from the thought of Manu. It is thus proved that the deification of the sanctifying water of life was the product of earnest thought on the mysteries of creation, and was an explanation which united the worship of the gods with a purer rule of conduct.

It was when she refused to acknowledge Mitra-Varuna as her parents, that Manu gave her the middle or highest place in the sacrifice. Hence the bisexual Idā, who have the middle or the third place among the five seasonal gods, represent a later form of the great goddess who, before the

¹ Alberuni's India, Sachau's edition, chap. lxxvi. vol. ii. pp. 179, 182, and 183. The goddess is called by Alberuni Gauri, a name by which she is still known, but her more usual name is Durga or Lakshmi. She is also called Kali and Uma, which last is merely another form of the name Amma or mother, and also Pārvatī or the mountain goddess. She is also the Amma or mother worshipped under various names by aboriginal tribes such as the goddess Ammakuveri of the Kodag of Coorg, Mariamma or Poloramma of the Kurus of the Dekkan, Komalamamma and Sarlamma of the Kois or Gonds. See Prof. G. Oppert, On the Original Inhabitants of Bhāratarashā or India, part ii. pp. 165, 205, and 146.

supremacy of the phallic god and the moon-goddess, was herself not only the ruling, but the only god of her earthly worshippers. Therefore it is said in the ritual of the Brāhmaṇas, "He who performs the sacrifice with the Idā ceremony propagates the race which Manu generated."¹ The ancient place of Idā in the sacred hierarchy is still more clearly shown in the Aitareya Brāhmaṇa, where the priest who brings fire to the animal sacrifice is ordered to place it in the centre of the central altar, saying, "We place thee in the place of Idā, in the centre (navel) of the earth, to carry up our offerings."² Again, in the Śatapatha Brāhmaṇa the priest, when he calls Idā to the sacrifice, is said to call the triad of the earth, air, and sky.³ These passages and the reference to Mitra-Varuna in the Manu legend make it clear that the divine mother was once the centre of the triad of which Varuna, the heaven, and Mitra, the moon-goddess, were the other members. She was the female form of the god who, in the mythology of the northern tribes, was called Irā, or Aryaman, the heavenly bull or cow, and which, as Śiva-Uma, the Virāj or Androgynic form of the generative power, was worshipped by the southern mother and phallic worshippers. That Idā and the bull-cow Irā were connected is actually asserted in the Śatapatha Brāhmaṇa in the passage where, when the priest calls Idā, the cows with the bull are said to be called.⁴ In the Soma sacrifice the Soma is brought to the outside of the consecrated ground by a sacred cow, who is called Idā and Chandra (the moon). This shows that Idā, the universal mother, afterwards became the twin sister of the moon-goddess and the mother of Soma, the divine drink, which was her offspring. As the sacred cow steps into the sacrificial inclosure, the priest fills

¹ Śat. Brāh. i. 8. 1. 7-11, vol. xii. pp. 218-219.

² Ait. Brāh. i. 5. 8. 28, p. 62, Haug's translation, vol. ii., from Rg. iii. 29. 4. She (Idā) is the dividing-line, the Ides of the Roman calendar, from "Iduare," to divide, which formed the middle of the old Roman lunar month, but which in the solar year happened on different days of the month, sometimes on the 13th and sometimes on the 15th. It is impossible to avoid the conjecture that the Roman Ides, the Greek Ids, the mother mountain, and the Hindu Idā, the mother earth, are all intimately connected.

³ Śat. Brāh. i. 8. 1. 19, vol. xii. p. 222.

⁴ Śat. Brāh. i. 8. 1. 19, vol. xii. p. 222.

her seventh footprint with butter, the heavenly sap, and the dust mingled with the sacred butter is given to the sacrificer first, and afterwards to his wife, as an earnest of the offspring that is to be born from them. The earth, from which the dust is taken, is said to be Āditī, the mother earth.¹ The myth which makes Idā the mother of Soma is the same as the Greek myth which makes Dionysus, the god of the vine, the son of Demeter, the mother earth.

The Sacrifice to the Three Mothers.

The above citations leave no doubt whatsoever as to the great and widespread reverence formerly paid to the earth as the mother of all beings; but the great antiquity of the worship in India is most conclusively shown by the sacrifice to Rudra Triambakāḥ, or Rudra with the three wives or mothers (Ambaḥ). This sacrifice is in the Brāhmaṇas directed to be offered after the completion of the Sākamedhāḥ, the last of the three seasonal sacrifices, one of which was offered during each of the three seasons. The fact that in these sections of the ritual only three seasons are recognized, instead of the five seasons which, we have already seen, were acknowledged in the older ritual, is only one among the many conclusive proofs which will be adduced afterwards to show that these three seasonal sacrifices were introduced by the Northern tribes;² but the ritual prescribed for them was based, as will be also shown, on the older ritual of the moon and snake-worshippers, who reckoned five seasons first and six afterwards. The Sākamedhāḥ is the autumnal sacrifice; and as the ritual of the sacrifice when analyzed gives very clear and graphic proof, not only of the several stages in the evolution of religious belief which I have already traced in the five

¹ Śat. Brāh. iii. 3, 1. 2-12, vol. xvi. pp. 69-62.

² These correspond to the three yearly festivals of the Northern Scandinavians. The spring sacrifice (Vaisvadeva) to the Midsvetrablöt or Jölablöt, held at the time of the winter solstice. The summer sacrifice (Varuna-praghasa) to the Victory sacrifice Sigrlöt, occurring about the middle of April, before the warlike expeditions of the summer. And the autumn sacrifice (Sākamedhah) to the winter sacrifice Vetrablöt, which took place about the middle of October. St. Olaf, 115, quoted by Du Chailu, *The Viking Age*, vol. i. chap. xi. pp. 344-346.

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seasonal sacrifices, but also of the actual history of India during the earliest ages, I will here give full details of the ceremony. In doing this I shall try to show the meaning of its several parts and the historical evidence furnished by them. The orthodox Sākamedhāḥ sacrifice consists of three parts. First, the preliminary sacrifices, secondly the great oblation (Mahāhavis), and thirdly the Pitriyajña or sacrifice to the fathers. The whole sacrifice is arranged in the Brāhmaṇas in especial honour of Indra, the slayer of the Vṛitra, or serpents. Now the name by which Indra is known outside the Vedic literature is Śakra, or Sakko, the god of the Sākas, and when this is once remembered, and the whole tenour of the sacrifice considered, I think that no one will doubt that Sākamedhāḥ means the sacrifice (medha) of the Sākas, and that it is not, as the authors of the Black Yajus try to make out, called Sākamedha because it is performed (Sākam) simultaneously with the rising sun.¹

I. *The Preliminary Sacrifices.*

These consist of nine offerings.² The Śatapatha Brāhmaṇa directs³ that on the morning of the feast day a rice cake is to be offered to Agni Anīkavat on eight pots/herds; at midday a potful of boiled rice is to be offered to the Marutah Santapanah, or the Maruts the Scorchers; in the evening a potful of boiled rice to the Marutah Gṛihamedhinah, or the Maruts the householders. The grain in this last stage of the sacrifice must be whole, and it is boiled with milk milked from the cow into the pot in which the grain is boiled. The boiled milk and rice offered in this

¹ Sat. Brāh. ii. 5. 3. 2, vol. xii. pp. 408-409, note 2.

² This is the number sacred to Vishnu, and shows that the ritual of the sacrifice had been finally arranged by sun-worshipping priests. The sacred number nine commemorates his three victories over the triple triad, the triad of heaven, the old Aryan triad of Varuna, Aryaman and Mitra; the triad of the air; the triad of the Indra-worshippers of heaven, the fertilizing rains and the mother earth, and the triad of the materialistic earth-worshippers of the father, the moon and earth goddesses. See Sat. Brāh. i. 9. 3. 9, vol. xii. p. 268, also Part II. of this series, J.R.A.S. April, 1889, p. 303, where I show that there were only nine Indras among the thirty-three gods of time in the solar-lunar year of Vishnu.

³ Sat. Brāh. ii. 5. 3. 1-20, vol. xii. pp. 408-417.

oblation is basted with butter before it is removed from the fire, showing that these last Maruts belonged to the older gods. After these offerings had been made without any fore- or after-offerings, it is said to be optional with the priests to continue to offer on the same day the four remaining sacrifices which precede the Darvi-homa to be offered to Indra, or to postpone them till the next day.¹ These four offerings are made to Agni and Soma, the Maruts Gṛihamedhināḥ and Agni Svishtakrit. They are all made with libations of melted butter taken from the butter which had been poured into a hollow formed in the two portions into which the porridge first made for the Maruts Gṛihamedhināḥ had been divided. The importance of these butter offerings to the older gods is shown by two alternative forms of the rites being given. These chiefly differ in the original pot of rice porridge being kept whole or divided into two portions, and in the butter being kept in a separate pot or poured into hollows made in the two porridge pots. These differences, which probably arose from the amalgamation of the worship of Agni with that of the phallic gods, appeared important to the priests, but need not concern us. If these offerings to the old triad of Soma, the moon-goddess, the Maruts Gṛihamedhināḥ, the mother earth, and Rudra, the father, with the addition of Agni, the fire-god, begin the second day, they are followed by offering part of the sacrificial rice prepared for the Maruts Gṛihamedhināḥ to Indra. This is called the Darvi-homa,² and may begin the sacrifices of the second day. This is followed by an offering to the Maruts called Kṛīdinaḥ (the sportive), who accompanied Indra when he went to slay Vṛitra.

Meaning of the Preliminary Sacrifices.

Taking these sacrifices in order, the first is that to Agni Anikavat, or the sharp-pointed Agni. I have already shown

¹ Śat. Brāh. ii. 5. 3. 5, vol. xii. p. 410, note 2; Tait. Brāh. i. 6. 6. 6; Kāty. v. 8. 3-5. 32-33.

² Śat. Brāh. ii. 5. 3. 17, vol. xii. p. 415.

that Indra's thunderbolt, with which he slew the serpent gods, is said to be the fourth Agni.¹ The thunderbolt is elsewhere said to be sharp-pointed, and is described as made of the point (anika) Soma, the divine drink, the barb (salya), and Vishnu the connecting piece (kalmala).² So that Agni Anikavat is Indra's thunderbolt.

The Marutaḥ Santapanāḥ (the scorchers) are the rays of the sun which burnt up the serpent race, and the Maruts Gṛihamedhināḥ, to whom rice and milk melted with butter are offered, are the nourishing house-mothers, the daughters or wives of Soma, the moon, the representatives of the universal mother after she had ceased to be the mother of the united tribe, and become the mother and guardian of the separate households into which the tribe was divided when family life and the worship of the household fire were substituted for tribal life and the worship of the tribal and territorial gods. This change, as I shall shortly prove, was one made by the northern immigrants who arranged these three seasonal sacrifices.

The truth of the first part of this interpretation is confirmed by the sacrifice to Agni Anikavat being made on eight potsherds. These represent the four Agnis, the old triad and Indra's thunderbolt, whose strength is doubled by being formed into four productive pairs.³

Thus on the first day the sacrifices offered are to Indra as Agni, the thunderbolt, to the sun-god and the Maruts, or mothers. As the first two sacrifices to Agni Anikavat and the Marutaḥ Santapanāḥ are evidently later additions, it is clear that the original sacrifice was to the great mother, afterwards changed into one to the Maruts. This, as will be shown, ruled the rest of the sacrifice. The remaining four sacrifices intervening between that to the Maruts Gṛihamedhināḥ and the Durvi-homa to Indra are made to Agni, Soma, the Maruts Gṛihamedhināḥ, and Agni Svishtakrit, or

¹ Sat. Brāh. i. 3. 2. 14, vol. xii. p. 88; i. 2. 4. 1, vol. xii. p. 52.

² Sat. Brāh. iii. 4. 4. 14, vol. xxvi. p. 108.

³ Or rather perhaps the seven Vasus of the sacred week of the early Indra-worshippers, to which the sun-god, the eighth Vasu, was added, thus making the eight Vasus, reckoned among the thirty-three gods in the Brāhmaṇas.

the phallic Rudra, who share the offering made to the Maruts *Grihamedhināḥ* in the first three of the series. These four offerings evidently represent two forms of the old triad, one in which Agni, the god of the fire-stick, was the ruling and creative power, and the other in which this power was ascribed to the moon-goddess. In the earlier triad is the moon-goddess, the mother earth, and the father of all beings, and in the other the place of the moon-goddess is taken by the fire-god. On the second day at the sacrifice of the *Darvi-homa* Indra, like the four gods whose sacrifice preceded his, shares part of the porridge which was made for the Maruts *Grihamedhināḥ* and is again offered to him in his own name.¹ This is followed by a sacrifice of a special cake to the mothers called *Kṛīdinaḥ*, the sportive or child-bearing, as representatives of the great mother and the wives of Indra, who here represents the male principle. The sacrifice to the Marutah *Kṛīdinaḥ* is made on seven potsherds, showing that they were the gods originally worshipped in the sacrifice, and that they represent the seven gods revered before the sun-god, the eighth Vasu, was added. They are probably the seven messengers of Anu of the Akkadian theology, the servants of Mātu, the wind-god, who appears in the *Mahābhārata* as *Mātali*, the charioteer of Indra.²

¹ Śat. Brāh. ii. 5. 3. 17, vol. xii. p. 415, note 3. See also Tait. Brāh. i. 6. 7. 3.

² Sayce, Hibbert Lectures for 1887, pp. 199-200; *Mahābhārata*, *Udyoga Parva*, xvi. civ. pp. 300-315. These seven messengers of Anu and the seven Vasus of the moon- and snake-worshipping Hindus were almost certainly the seven days of the week, which I have shown in the Appendix to have been first sanctified by the worshippers of the fire and water-god. The week as a measure of time was, as I have also shown, not reckoned till after the month, or rather perhaps the week was first used as a measure of time by the Sumero-Akkadians in connection with the year of gestation of ten months or forty weeks, a calculation which made forty the sacred number, and which caused the forty days and nights of the sacred rain to be regenerators of the earth at the flood. As this year was, like other Sumero-Akkadian primary institutions, connected with the worship of En, the water snake-god, the seven days of the week were consecrated to him first, and afterwards in India to his counterpart Indra, the god of the fertilizing waters. This explains the connection between Indra and the seven Marutah *Kṛīdinaḥ*. The weeks do not seem to have been reckoned in the lunar year of thirteen months, but to have come from the earlier year of ten months.

II. *The Great Oblation (Mahāhavis).*

This, which follows the nine preliminary offerings, is, like them, a sacrifice in honour of Indra. It consists of eight offerings: (1) A cake to Agni on eight potsherds, (2) a pot of boiled rice to Soma, the moon, (3) a cake on eight or twelve potsherds to Savitri, the sun, (4) a pot of boiled rice to Sarasvatī (the possessor of speech, *sara*), the river-goddess, mother of the Aryan race, (5) a pot of boiled rice for Pūshan, (6) a cake on twelve potsherds for Indra-Agni, (7) a pot of boiled rice for Mahendra, or the great Indra (Mahā-Indra), a name assumed by Indra after he slew Vṛitra, the serpent-god, and (8) a cake on one potsherd for Visvakarman, the creator or maker (karman) of beings (Visva).¹

Now, comparing these offerings with the seven made at the Vaiṣvadeva or spring sacrifice,² we find that the first five offerings are the same in both sacrifices, but in the Vaiṣvadeva sacrifice the sixth is a cake to the Maruts on seven potsherds, exactly like the offering made to the Marutaḥ Kridināḥ in the Sākamedha sacrifice, and the last or seventh sacrifice is one cake on one potsherd to Heaven and Earth conjointly, as the agents by which Prajāpati, the lord of all beings, created all things.

The gods of the Vaiṣvadeva sacrifice clearly represent an earlier phase of religious belief than that shown in the Mahāhavis of the Sākamedha, and the proof of this is given in there being seven offerings instead of eight, the number offered to the gods of the sun-worshippers. But the meaning of the several gods to whom sacrifices were offered will come out more clearly on comparing these sacrifices with the five seasonal sacrifices already described.

The five gods of the seasonal new and full moon offerings are as we have seen (1) The Samidhs or kindling-sticks, (2)

¹ Sat. Brāh. ii. 5. 4. 3-10, vol. xii. pp. 418-419.

² Sat. Brāh. ii. 5. 1. 8-17, vol. xii. pp. 386-388. Vaiṣvadeva are the Devas or gods of the country (Vis), the indigenous gods; but though called indigenous, the comparison with early indigenous rites shows that several of them were imported at a late period, such as Savitri the sun, Sarasvatī the Aryan mother, and, as I shall also show, Pūshan.

Tanūnapāt, (3) Idāh, (4) the Barhī, and (5) Agni Svish-takrit or Rudra. Now the Agni in the Vaiṣvadeva and Sākamedha sacrifices is plainly the same as the Samidha, only the Samidha bring out more clearly the fact that the god of the fire-stick (Svastika) was regarded by his worshippers as the active agent in the work of generation, as he, by infusing the divine heat, did the work originally attributed to the phallic god. Tanūnapāt is, as we have seen, spoken of in the Rīgveda as the moon-god; but the moon-god was the central ruling power by whose aid the male and female principles are made able to generate living beings. The god who in the five seasonal offerings is called by the mystical name Tanūnapāt, the self-created, is in those I am now dealing with called by the old name of Soma, the moon-god; but it is Soma when looked on as the great mother who generated life by the impulse (muni) given to her by the heavenly fire. I have already brought forward a great deal of proof, to which much more will be added in the sequel, to show that life was originally held to come from the mother. Therefore, considering that creation was first explained as an act of generation, when Agni, the fire-god, took the place once occupied by the earthly father, the moon-goddess, who watched over mothers about to bear children, and presided over the ten months of gestation, must have embodied the spiritual essence of the female principle, and these two gods represented the generation of the heavenly powers, and between them they represented the heavens as one member of the supreme triad. They were the two aspects of Varuna.

In discussing the Idāh I have shown that they represent the original androgynic or bisexual god, purified and spiritualized by thought into the deification of the agency of the fertilizing waters, and that they were held to be the central or ruling power in the sacrifice. Hence in the Vaiṣvadeva sacrifice the central place of the Idāh is assigned to Savitri, the sun-god, who is here said to be the "impeller" of the gods. It was the sun-god who was by the Semite-Akkadian worshippers of Vishnu regarded as the type of the spiritual

power from which all life proceeds. That power which was once assigned to the creative force animating the phallic gods as the bisexual agent, the moon-goddess or the fire-god, and which was then transferred to the waters, was by the last reform made over to the sun-god. When treating of the Barhis I showed that the seeding grass and the altar represented the pregnant mother, and she again appears in the Vaiṣṇadeva and the Sākamedha ritual as Sarasvatī (she who is possessed of speech), the river-goddess, who was the mother of the Aryan race, while in Pūshan we have the phallic god Rudra, but not the original god represented by the linga, but the bull-god of cattle, also called Paśupati, lord of cattle,¹ the father of the Haihayas, or sons of Hea, the adorers of the god of the fertilizing waters and the sacred rivers. He, like Idā, the purified mother, is the special phallic god of the Indra-worshippers. These were the races especially favoured by heaven, the Aryans living on the Sarasvatī, and their near neighbours, the Haihayas or Irāvata, living on the Irāvati or Purushni river, the modern Ravi.

The two remaining sacrifices in the Vaiṣṇadeva offerings to the Maruts and to heaven and earth are especial sacrifices to the gods of time. That to heaven and earth, or to Prajāpati, is the sacrifice to the great god who rules the lunar or sacrificial year; and that to the Maruts, which is offered on seven potsherds, is the sacrifice to the seven days of the week, forty of which periods complete the sacred period of gestation. Of the whole series of seven sacrifices, the first two represent the heaven, or Varuna; the next three the

¹ Mr. R. Brown, jun., author of "The Great Dionysiak Myth," and other learned works on Græco-Akkadian mythology and ethnology, has kindly suggested to me what seems to him to be a probable Akkadian derivation for Pūshan. He thinks it may be derived from *pu*, meaning 'marsh, watery element,' *su* 'power,' and *ana* 'god.' His appearance as the phallic god in these sacrifices, which show everywhere the strongest possible indications of the influence of Indra-worship, is only one of the proofs which specially connects him with this cult. I have further worked out the connection, when treating of the Greek Poseidon. He appears to be the male god of the Haihayas or sons of the fish-god Hea, who exactly answers to the name Pu-an-ana. Further evidence in proof of this conclusion is given by the name Pushkara. This was the name given to the moon-goddess by the Indra-worshippers, and is interpreted as meaning the "lady of the divine lotus," but it also means the maker (*śar*) of Push, or, in other words, the sacred cow, the mother of the bull Push.

Aryaman, or Idā, which was once the bull with the two cows, Idā the universal, and Sarasvati the tribal, mother, but which was altered by the change from Idā to Savitri;¹ and the third the seed-bearing mother earth.

In the Sākamedha sacrifice this simple and original picture of the inner meaning of natural changes has been distorted by the later Indra-worshippers, who worshipped Indra not as the peaceful god of the fertilizing waters, but as the warrior-god of the Śāka invaders. They inserted a central warrior-god in the original duad of the heavenly and earthly gods of time, discarded the Maruts representing the mother earth, and made Mahendra, the great Indra, the ruler of a new triad, or the god from whom Visvakarman the creator derives his power.

This analysis of the first two parts of the Sākamedha sacrifice, (1) the preliminary offerings, and (2) the Mahāhavis, has, I would submit, not only fully proved the great importance assigned in it to Indra, but also shows how the Indra-worshippers had gradually altered the older ritual by changing the meaning of the old gods to suit their new conceptions, and by adding new gods to the original ritual.

The Indra worship thus introduced superseded three successive triads which had one after another been worshipped, when a third power was thought to be necessary to account for the generation of successive series of living beings, and this again was preceded by an earlier stage of religious belief. First there was the mother earth, then the father and mother of all things, and then came the triads in the following order:

I. (1) The father, (2) the life-giving bisexual power, (3) the mother earth.

II. (1) The father, (2) the moon-goddess, (3) the mother earth.

¹ It seems probable that Savitri was originally feminine, and meant the sun-maiden. She is certainly a feminine goddess in the beautiful myth telling of the devotion of Savitri the sun-princess, daughter of Agyapati, the lord of horses and king of the Madras, to her husband Satyawān, son of Dyumatsena, the exiled king of the Salwas, and of how, as Orpheus rescued Eurydice, she redeemed her husband from the god of death, by whom his life was taken after they had been married a year. See Mahābhārata, Vana (Pativratā Mahātmya) Parva, cxxxi.-ccxcviii. pp. 864-883.

III. (1) The self-producing fire, (2) the moon-goddess, (3) the mother earth.¹

This system was fundamentally altered by Indra-worship, which discarded the material agents of the earlier theologists, and made the god of the water of life and of the fertilizing rains the father of all beings. This change probably originated in the regeneration of Hea worship among the Sumero-Akkadian races, which is ascribed in the *Zendavesta* to Thraētaona, who slew Axi Dabāka, the three-mouthed snake of Bawri (Babylon), and probably the Aryans had a good deal to do with it, as with most, if not all, other religious reformatations recorded in history. The whole evidence shows an intermixture of the Aryan triads with that of the phallic snake-worshippers. The triad in which the fire-god becomes the father appears to be of Aryan origin, and the Aryans had also a triad in which Varuna the heaven is the first god, Mitra² the moon-goddess the second, and Idā³ or Aryaman, the sacred bull or cow, afterwards called Prithivī, the earth, the third. When Indra-worship became the accepted religion, this triad, which was that of the Vedic bards, became Dyū, or the heavenly bright one, Indra and Prithivī, Indra taking the central place of the moon-goddess instead of his original place as the father. No one who has studied the *Rigveda* and early Sanskrit literature can doubt

¹ Similar triads with the two female goddesses appear in Biblical genealogy and in the *Zendavesta*. In the Bible as Lamech with his two wives Adah and Zillah. Lamech is, as Dr. Sayce shows, the Semitic equivalent of Lamga, a name which I have identified with the Hindu Linga. Adah and Zillah mean darkness and shade, or the moon-goddess of night and the mother earth. See Sayce, *Hibbert Lectures* for 1887, pp. 185-186, note 3 of p. 185, and Part III. of this series, *J.R.A.S.* July, 1889, p. 538. In the *Zendavesta* the triad is Axi Dabāka, the snake-god, and his two wives, Savanghavāch and Erenavāch, who were after the death of the snake-god married by his conqueror Thraētaona. Darmesteter's *Zendavesta*, *Aban Yast*, ix. 34, *Sacred Books of the East*, vol. xxiv. p. 62, note 2.

² Mitra is the moon-goddess, the god of the heavenly light, Darmesteter's *Zendavesta*, vol. iv. *Sacred Books of the East*, Introduction, iv. 8, p. 60. See also *Mihir Yast*, xxiv. and xxviii. 95 and 112, *Sacred Books of the East*, vol. xxiv. pp. 143 and 148, where, in the first passage, Mithra is said "to go over the earth all her breadth over, after the setting sun touches both ends of this wide round earth," and in the second he is called "a warrior with the silver helm."

³ Idā is apparently not an Aryan but an Akkadian goddess, connected with the Akkadian Iru, the sacred bull; but the Aryans may have been and probably were the race who made this god and the god of the fire-stick the principal gods of the Northern Akkadians.

that this fundamental revolution in religious thought, with the corresponding changes in the sacrificial ritual, were connected with the conquest of the country; and the whole of the evidence hitherto examined, which will be largely added to in the sequel, points to the Sākas or Scythians, worshippers of the god whom they called Śakra or Sakko, and identified with Indra, as the conquering race.

There can, I think, be no doubt that the whole of the ceremony of the Mahābhavis was introduced by the Śākas, and that the original preliminary sacrifices of what were the autumnal sacrifices to the fathers and mothers were the five offerings to the sacred triad and the tribal mother and father.¹ The next stage in the sacrifice was the offerings to the mothers who were originally worshipped as the mother earth, and appear in the present ritual as the Maruts Gṛihamedhināḥ, and that this sacrifice was followed by that to the fathers, which is still retained as the Pitṛiyajña, and marks the third stage of the sacrifice in the ritual of the Brāhmaṇas.

The Pitṛiyajña.

The rules for this sacrifice are especially instructive. In them the fathers are divided into three classes: (1) The Pitarāḥ Somavantāḥ, or Soma Pitṛimat, meaning the fathers accompanied by Soma, the moon, or Soma accompanied by the fathers. To them a rice cake on six potsherds representing the six seasons is offered.² (2) The Pitaro Barishadaḥ, the fathers seated on the Barhis, to whom unground parched barley grain is offered. (3) The Pitaro 'Gnishvātāḥ, or the fathers consumed by fire, for whom one-half of the parched barley grain prepared for the Pitaro Barishadaḥ is ground and made into porridge by being mixed with the milk of a cow suckling an adopted calf.³

¹ This five-fold sacrifice, representing the year, is continually said in the Brāhmaṇas to be the oldest form of offering, Śat. Brāh. i. 2. 3. 7 and 8, and i. 7. 2. 8, vol. xii. pp. 51 and 192; iii. 1. 4. 20, vol. xvi. p. 24.

² The six seasons were the number into which the full lunar year of thirteen months was divided by the southern nations. See Appendix.

³ Śat. Brāh. ii. 6. 1. 4-6, vol. xii. p. 421.

The invitatory and offering prayers addressed to each of these three classes and chanted by the priests at the sacrifice show the distinction between them most clearly.¹ They are taken from four hymns of the Rigveda, Rg. x. 15, addressed to the fathers, Rg. ix. 96, i. 91, and viii. 48. These last three are all hymns to Soma, the moon, as Indu, the divine drop, sap, or essence,² and all speak of this god as omnipotent, and as the ruler of gods and men. Perhaps Rg. ix. 96 gives the ideas embodied in the conception of the god in the clearest form. In it Soma is spoken of as the friend and charioteer of Indra (v. 2), he who calls down the water and rain from heaven (v. 3), the creator of prayer, of heaven and earth, of fire and the sun, of Indra and Vishnu (v. 5), he who inspires poetry and prayer, the heavenly bull who with the cow creates all things (v. 7), the god who gave creative force to Manu (v. 12). From these extracts it is clear that the god addressed is the one omnipotent and supreme god. But these three hymns to Soma as the god of gods are only used in the invocations to the Pitarah Somavantah and the Soma Pitrimat, that is, to the fathers who worshipped Soma as the divine essence or creative principle, who first gave life-giving power to the mother earth and afterwards to the father, and who from heaven, as the moon-goddess, directed the sacred period of gestation and generation, the so-called year of ten months and the full lunar year of thirteen months. The fathers of the last two classes, the Pitaro Barishadah and the Pitaro 'Gnishvāttāb, are only invoked in the stanzas of the hymn written expressly in their honour, and the gods spoken of in this hymn are not the gods of the old triad, but the gods of a later age, when Vishnu, the ruling god of the solar-lunar year, Soma, the divine drink, and Agni, the god of the heavenly fire,³ had taken the place of those of the earlier religions.

¹ Sat. Brāh. ii. 4. 1. 26, vol. xii. p. 423, note 6, where these prayers are recorded.

² Indu means 'drop' or 'sap,' Max Müller, *Lectures on Science of Language*, 2nd series, p. 430, note.

³ A different god from the half-phallic god of the Swastika, the self-producing earthly fire.

Verses addressed as Prayers to the Pitarah Somavantaḥ and Soma Pitṛimat.

The invitatory prayers to the Pitarah Somavantaḥ are Rg. x. 15. 1, ix. 96. 11, and to the Soma Pitṛimat, Rg. i. 91. 1 and 20. In the first of these stanzas the three races of the fathers, the first, the middle, and the last, are addressed, showing that the author of the hymn recognized the same distinction into classes as is made in the Brāhmaṇas. This is further shown in stanza 2 of the same hymn, where the fathers are classified as those who live in the air, in the earth, and in the villages. That is to say, into those who worship the earth-born gods, those who worship Indra or the gods of the air, and those who were the immediate ancestors of the race living in Northern India when the hymn was written. In Rg. iv. 96. 11 the bright shining Soma through whom our fathers did all their deeds is invoked, and here the meaning clearly oscillates between the bright shining moon and the bright and brightening drink. Rg. i. 91. 1 is more mysterious. In the first stanza Soma is thus invoked: "Thou, O Soma, surpassest all in wisdom. Thou, O Indu, ledest up the steepest path. Through thy guidance have the fathers received protection from the gods." Stanza 20 says, "Soma gives cows. Soma gives swift horses. She gives the son who is a cunning craftsman. He who honours Soma is crafty, in the house, in the feast, and in council an honour to the fathers." This hymn is shown by Max Müller to be, in the opinion of the commentators on the Upanishads, addressed to Soma, the moon-goddess,¹ and in these verses it certainly means the moon-goddess in a mystical sense. It is she who as Indu, the vital sap carrying with it the creative force, leads up the steepest paths of the heavenly vault, and it is she, the creative spirit, who gives wealth in cattle, wisdom, and children.

The offering prayer to the Pitarah Somavantaḥ is Rg. x. 15. 5, and to Soma Pitṛimat, viii. 48. 13. In the first of these verses the fathers who delight in Soma are called to

¹ Kaushitaki Upanishad, ii. 8, Sacred Books of the East, vol. I. p. 286, note 2.

come "and partake of the food placed on the sacred grass." This food is the butter, which we have seen was sprinkled on the grass and altar in honour of Rudra and the phallic gods. In Rg. viii. 48. 13 the address runs as follows: "Thou, O Soma, who art united with the fathers, who hast spread thyself over earth and heaven. It is Indu (the divine essence) whom we should serve with offerings and thus become the owner of all treasures." Here, as in Rg. ix. 96. 11, the meaning seems to waver between Soma, the shining moon, and Soma as Indu, the vital energy which kindles all things into life.

Verses addressed to the Pitarah Barishadah.

The invitatory verses to this second class of fathers are Rg. x. 15. 3 and 4, where they are called "the fathers rich in gifts, the children, and the highest step of Vishnu." They are asked to come and sit on the sacred grass and drink the Soma brought to them. The offering prayer is also taken from v. 2 of the same hymn, to which I have already referred, where the fathers are described as those living on the earth, in the air, and in the villages. The invitatory verses show that the fathers representing the highest step of Vishnu must be later than those who worshipped the moon-goddess, for, as I have already shown, Vishnu in his three strides vanquished the gods of the old religion and made his own the three regions ruled by the sacred triad.¹ They are called on to drink Soma, which is throughout the Rigveda spoken of as Indra's special drink, and it was also the drink of the Sākas, as is proved by the mention of the Sākas in an inscription of Darius as they who prepare the Haoma, or Soma.² Thus the Soma, the divine drink, was the favourite drink of the Sākas, who gave their name to the Sākamedha sacrifice.

¹ Sat. Brāh. i. 1. 2. 13, vol. xii. p. 14.

² The Sākas are called in this inscription "Saka haumavarza," i.e. the Sākas who prepare the Haoma or Soma, Penka, *Origines Ariænes*, p. 137. In the same inscription the Sākas are called "tigrakhandā," that is, having a pointed helmet. This epithet is very like the name Agni Ankavat, the sharp-pointed fire, which is, as I have shown above, the name of Indra's thunderbolt.

The offering of parched barley made to them instead of the rice-cake offered to the Pitarah Somavantaḥ also shows a difference of race. Barley is in the Śatapatha Brāhmaṇa Varuna's corn, and it was and still is the special food of the northern tribes in contradistinction to the rice eaten by the snake, moon, and mother worshippers of the south.¹ The fathers, to whom parched barley was offered as sacrificial food, were those who came from the north, and who worshipped, as I have already stated, a different triad from that of the Southern Dravidians. Their supreme gods were Varuna, heaven, Mitra, the moon-god, and Aryaman or Idā, the sacred bull or cow, the mother earth. These, except Idā or Aryaman, who, as I have shown, is an Akkadian god,² were certainly Aryan gods, or at least gods who were brought from Irān, as is proved by their names being all found as those of supreme deities in the Zendavesta.³ The place of Mitra, the moon-god, was subsequently taken by Indra, or rather by his earlier representative Hea, the Akkadian fish water-god. But in India the Indra of the Northern as distinguished from the Hea of the Southern tribes became a god of quite a different stamp from the doity of the fertilizing rains when he became the warrior god of the Sākas, and it is in this last capacity that he generally appears in the Rīgveda. I have already shown in Part II,⁴ that probably the earliest Sāka tribe which arrived in India were the Gandhāra, called also Chitraratha, or charioteers, and Kuṣikas, and it was apparently to this people that the parched barley was offered as the most appropriate food for

¹ Sat. Brāh. ii. 5. 2. 1, vol. xii. p. 391. In the North-West of India at the present day the poorer classes all live on barley meal, while the richer eat wheaten cakes. Rice is almost unknown as food.

² See above, p. 366, note 3, but she may have been an Aryan goddess introduced into the Akkadian theology. She is certainly not a snake-god.

³ Darmesteter's Zendavesta, Introduction, ii. p. 29, and iv. 3. p. 68, also Fargard xxii. p. 229, vol. iv. Sacred Books of the East. Varuna is the Aryan name of Ahura Mazda, as Prof. Darmesteter points out; but the name Ahura in Ahura Mazda was, as he also shows, once Asura, and Asura points to an Akkadian origin, as also does the name Aryaman, which is evidently connected with the Akkadian Airu 'the bull.' But the triad which has its supreme gods in heaven clearly comes from a different source than that which ascribes the supremacy to the phallic god, and it is to the northern nations that its origin must be ascribed.

⁴ Part II. J. R. A. S. for April, 1889, pp. 190, 198, 215, 270, 295.

themselves and for their horses. I shall also later on furnish proofs of the special sanctity attached to horses by the Gandhāri, and also by the worshippers of Indra. The whole evidence leads to the conclusion that the Pitarah̥ Barishadah̥ were the Scythian cavalry and chariot drivers who, with their Aryan allies, brought the worship of Indra, the warrior god, into India from the northern settlements in Central Asia. The whole worship of Indra, both as the god of the fertilizing rains and as the warrior god of the thunderbolt, points to a northern origin. It was a people who came from the dry and thirsty land of Central Asia who would naturally regard the being who fertilized the parched soil with the freshening and life-giving rains and who slew his enemies with the thunderbolt as the best and most powerful of all gods.

Verses addressed to the Pitaro 'Gnishrātāh̥.

These, who are the fathers consumed by burning, clearly means those who burnt their dead instead of burying them unburnt.¹ This is distinctly shown by the offering stanza addressed to them Rg. x. 15. 14, where the dead who are burnt and those who are not burnt are spoken of, and the invitatory stanza Rg. x. 15. 11 speaks of them as those who were once consumed with fire. They were, like the Pitarah̥ Barishadah̥, a northern race, as they received half the barley prepared for their predecessors, the fathers of the second class, but this was made into porridge *mixed with the milk of a cow suckling an adopted calf*. I have already in Part II. shown that the cattle-herding tribes are said to be descended not only from Rohini, but also from Krodhā, the ancestress of the Kolarian race.² The offering of cows' milk would seem to imply a connection with the later Sūkas, the cattle-herdsmen known as Bhojas, and not the earlier race of

¹ Like the people of the later Bronze age in Europe, Lubbock, *Prehistoric Times*, 2nd ed. pp. 49-50. The evidence seems to show that in the beginning of the Bronze age the dead were buried in a sitting position; it is towards the close of the period that burning begins to be universal.

² J.R.A.S. April, 1889, p. 270.

charioteers called Gandhāri. They, as well as the Aryans, were, as I have already shown, closely allied with the Kolarians, as is proved by the legend in the Mahābhārata of the Brahmins marrying Nishadha or Kolarian wives.¹ These Kolarians were the adopted calf suckled by the sacred cow, and these legends apparently show that these tribes who were thus allied with the Kolarian race originally worshipped the mother earth under the form of Idā, the sacred cow. This old worship reappears again in the sacred mountain Idā, called the mother both in the Troad and in Crete, and in the legend of Pasiphaë, the moon-goddess, and the Minotaur, which represents the union of the moon-goddess and the earth, known in Crete as the bull of Minos, and in India and Irān as the sacred bull and cow.²

The Sacrifice to the Three Mothers, the Rudra Triambaka.

The evidence proving the three classes of fathers to represent the races who successively peopled India will appear much more convincing when the questions connected with this sacrifice are fully considered. In the first place both the great antiquity of the sacrifice and its former importance are shown by the fact that it is directed to be offered outside the consecrated sacrificial ground.³ From this it is clear that the sacrifice is one which was thought to be of national importance by a people who had not yet become sufficiently ritualistic to insist on consecrating a place for the performance of the sacrifice, or to make a sacred altar to represent the mother earth. If it still continued to be offered by those who thought a consecrated altar and hallowed ground a necessary adjunct of a complete sacrifice, it must have been thought a most essential ceremony by their predecessors, whose

¹ J.R.A.S. April, 1889, p. 253.

² The Cretan triad would appear to be Minos the god of justice, Pasiphaë the moon-goddess, and the Minotaur the earth. This is like the Hindu triad, shadowed forth in the Mahābhārata, of Dharma the god of justice, husband of the ten months of gestation, Kasyapa the father and husband of the thirteen months of the lunar year, and Dakṣa the father of their wives.

³ But the ground used was to be especially consecrated for the occasion, Śaṭ. Brāh. ii. 6. 2. 9, vol. xii. p. 440, note 1.

rude ritual they superseded by their more elaborate forms of worship. At the same time the prescribed rites show the sacrifice as offered by the official priesthood to be phallic, and therefore prove that it was from the earliest worshippers of the mother earth, who believed that the male and female principle were necessary factors in creation and production, that materialistic doctrines were derived.

The priest in this sacrifice took a sacrificial cake, the substitute for the animal sacrifice originally offered,¹ to a cross-road to the north of the consecrated ground, and offered it there to Rudra and his sister Ambikā. This he did by burying it in a mole-hill.² But in the older ritual preserved in the Gṛihya Sūtras it was not a cake, but the spit ox sacred to Rudra, which was sacrificed in the spring or autumn under the Nakshatra Ārdra, which means the son of Rudra, and its blood poured out for the serpents or snake-gods.³ The burying of the sacrificial cake in the mole-hill is clearly a reproduction of the custom of burying in the lands of the several members of the tribe, for whom the sacrifice was offered, part of the body of the man sacrificed in the Meriah sacrifices of the Khonds.

Human Sacrifices originally offered to the Mother Earth.

To prove the connection of the sacrifice of Rudra Triambakāḥ with human sacrifices, and to show that it was first offered, not to Rudra, but to the mother earth, it is necessary to trace the history of similar sacrifices. In the first place, both in the Aitareya and Śatapatha Brāhmaṇas, human sacrifices are said to be those which were first offered,⁴ and we find the same precedence given to them in the history of all nations who killed sacrificial victims. This original

¹ Śat. Brāh. i. 2. 3. 5 and 8, vol. xii. pp. 49 and 51.

² Śat. Brāh. ii. 6. 2. 7-10, vol. xii. pp. 439-440.

³ Āśval. Gṛihya Sūtra, iv. 8. 1 and 2, vol. xix. Sacred Books of the East, Oldenberg's translation, p. 255.

⁴ Śat. Brāh. i. 2. 3. 6, vol. xii. p. 50; Ait. Brāh. ii. 8, Haug's translation, vol. ii. p. 80.

sacrifice was continued as the Meriah sacrifice among the Khonds of Orissa up to thirty-five years ago, and would, if English supremacy were withdrawn, reappear among all the aboriginal tribes of Central India just as it did during the disturbed times of the mutiny in Chota Nagpore, when numerous victims were thus offered. Isolated instances, several of which I distinctly recollect, still occur when crops threaten to be dangerously scanty, or when epidemics break out. The Meriah sacrifices of the Khonds were offered to Tāra Pennu, the mother earth, but this Tāra is not only a goddess of tribes speaking the aboriginal languages, but she is also worshipped by those who speak dialects derived from the Sanskrit. She has still her shrine in the sacred Buddhagaya,¹ and is described by Hiouen Tsiang as one of the most popular gods of ancient Magadha (Behar),² and under the name of Durga she is the goddess most revered by the people of Bengal.

What was offered to her was the blood of the victim, which was its life or vital essence.³ It was this life-giving blood which fertilized the earth, the mother of all things. Hence arose the idea that it was the blood of man, the most god-like of animals, which gave life to the earth and enabled it to bring forth the food, without which life could not be reproduced or sustained, and that therefore human sacrifices gave the earth not only the power of reproduction, but also the food which insured the continued use of this power. That this idea underlay all the old rituals is shown in the statement in the Brāhmanas that man is the sacrifice.⁴ From this followed the further corollary, to which I have already referred, that the sacrificer owed himself to the gods. This gave rise to the saying in the Brāhmanas that in sacrificing a victim the sacrificer sacrifices himself, or that he was sacrificed after having hallowed himself, by the ceremony of initiation, thus consecrating himself as the victim at the

¹ Monier-Williams, *Buddhism*, p. 216.

² *Real, Records of the Western World*, vol. ii. pp. 103, 174.

³ Genesis ix. 4.

⁴ Sat. Brāh. i. 3. 2. 1, vol. xii. p. 78; Kaushitaki Upanishad, Max Müller's translation, *Sacred Books of the East*, vol. i. p. 223.

animal sacrifices.¹ These were offered for his redemption, like the lamb offered in the Jewish ritual for the redemption of the first-born.² Also in another place it is said that when the life of the victim passes away, the sacrificer himself passes away to the gods.³

But the original and binding force of this idea is not so well shown in the Hindu and Jewish rituals as in the worship of Cybele, who was the goddess of the earth in Asia Minor. Her priests were bound to sacrifice themselves by sacrificing their manhood, and it is this feeling, that the best offering to the gods is man, that is the origin of all ascetic observances. What ascetics propose to do is, by the elimination and uprooting of earthly desires, to promote the new birth of the spiritual nature, so that, like the sacrificer in the Hindu ritual, the old man may pass away to the gods, and the mere animal life be replaced by the newly-born divine soul, which will descend from heaven to consecrate the recipient to a higher and better form of existence.⁴

But though these ethical deductions from the doctrine

¹ Śat. Brāh. iii. 6. 3. 21, vol. xxvi. pp. 161-162.

² Exodus xiii. 11-14.

³ Śat. Brāh. iii. 8. 1. 15, vol. xxvi. p. 150. The same idea reappears in the Epistle to the Hebrews, where it is said, chap. ix. 23, that without shedding of blood there is no remission.

⁴ This belief in the necessity of sacrificing the manhood of the priests of Cybele is apparently the origin of the custom of making eunuchs in the East. Herodotus, i. 105, tells how the Scythians used to make Enarees (eunuchs) of their children, having learnt the practice from the worshippers of Aphrodite, the great mother, at Ascalon. He calls it the female disease. That this is a very old tribal custom among certain Tartar tribes, and that it was not by any means confined to children, is proved by its existence at the present day. A gentleman who has lived long in Eastern Europe, and who has a most intimate knowledge of the people, tells me that the males of a Tartar tribe called Lippovan or Lippovans (he is not sure of the name) have been accustomed for ages to sterilize themselves either before or after they have had children. They have been expelled from Russia on account of this custom, but abound in Roumania, and in Bucharest almost all the cab-drivers are eunuchs belonging to this tribe. These people are probably the descendants of the race called Sarmatæ, who were, as Herodotus (iv. 110-117) tells us, formed from a union of the Amazons and Scythians, and the custom of sterilizing certain males probably arose during the matriarchate, to prevent the men of the tribe having intercourse with the females, for the rule was that the fathers were to be chosen from another clan than that of the mothers. Whatever the original custom may have been, it is certain that, like all Dravidian customs, archaic rule, and the head of the household became the husband of a number of wives, who were regarded as his property, the custom of making eunuchs was retained, as a means of supplying guards for the women of the harem, and preventing them from resorting to their former custom of temporary marriage.

which looked on man as the sacrifice are very ancient, they are incomparably more modern than the early beliefs of those who first offered sacrifices. To the earliest worshippers of the mother earth it seemed that it was only man who could make the earth bring forth its increase, and it was his blood which must give the earth that quickening energy which was necessary for the reproduction of life and the food which sustained it. Hence, in going back to the divine mother who gave both life and food as the author of all living existence, the oldest theologists reasoned still further back than their successors, who worshipped the father as the chief god.

The primitive belief, that it was the shedding of human blood and the sacrifice of human life that gave creative and productive power to the earth, is reproduced in the legend of the death and rebirth of Jantu in the *Mahābhārata*. King Somaka (the moon god) had one hundred wives, but only one son, Jantu. When he wished for more sons, his family priest (purohit) advised him to sacrifice Jantu in the presence of his wives. This would, he said, not only cause them all to become pregnant, but would bring Jantu to life again as the eldest of a hundred princes. Jantu was accordingly sacrificed, and the king obtained a hundred sons who were born from the blood of Jantu.¹

It was the blood of the sacrifice poured out at the foot of the altar which was the vitalizing element in the early sacrifice to the mother earth,² and these were offered before consecrated altars were introduced by the ritualists. The earliest altars were made, as I have already proved, of earth, and represented the earth as woman, the mother of all things.³ When the altar ceased to be of earth and became the stone or brazen altar, which had a phallic meaning, part of the blood which used to be poured on the ground was sprinkled on the altar.⁴

¹ *Mahābhārata*, Vana Parva, cxxvii.—cxxviii. pp. 386-389.

² *Leviticus* iv. 18 and 25.

³ *Exodus* xi. 24; *Sat. Brāh.* i. 2. 5, 14-16, vol. xii. pp. 62-63.

⁴ *Leviticus* i. 5 and 11, iii. 2, 8 and 13, iv. 7, 8 and 15. The stone altar in its simplest form was the *asherim* or *linga*, the sacrificial post or *yūpa*, to which the

The transition from the original theory of sacrifice, that the blood was the life infused into the mother earth, to the phallic theory, that the blood vitalized the linga, is best shown in the Hindu ritual. In this the sacrificial stake (yūpa) plays a prominent part. The animal, instead of being sacrificed on the earth, is first bound by the neck to a consecrated stake. This stake is eight-cornered, like the linga, the eight corners showing that it was a linga of the four Agnis or of the eight Vasus.¹ After being thus tied, the victim was killed according to the ritual of the Scythian Indra-worshippers followed in the Brāhmaṇas by being strangled; but this method quite ignored the meaning of the old sacrificial form of the Pitṛi Somavantaḥ, who were snake and linga worshippers. They, as we are told, stabbed the animal behind the ear.² The meaning of the old ritual clearly was that the animal tied to the yūpa by the neck was stabbed so that the blood should spirt over the yūpa or linga, and thence fall to the ground, thus fertilizing them both.³ The same text shows that the

victim was tied, and which was inserted in the earth as the "linga" in the "yoni." This is the form in which it appears in the Brāhmaṇas, where each victim has its separate yūpa (Śat. Brāh. iii. 7. 1. 22, and iii. 7. 2. 3-8, vol. xvi. pp. 173, 176-178) or wooden stake, but at a very early period built altars of brick were used, as we learn from the Katha Upanishad i. 1. 15, where Yama tells Nachiketas "what bricks are required for the altar, how many, and how they are to be placed" (Max Müller's translation, *Sacred Books of the East*, vol. xv. pp. 4 and 5). The Jewish altar, which was wood overlaid with brass, was disconnected with the earth, perhaps as a protest against phallic beliefs; but on the other hand, it was by its horns connected with the heavenly triad, which succeeded earth and phallic worship. The horns represented the heavenly bull or cow, but not in their earliest form of the bisexual principle, but as the moon-god, who was the father and mother of all living beings. But the brass which covered it connected it with phallic worship, as is shown by the brazen or healing serpent, which was an object of national worship. The brazen serpent was the Jewish representative of the old snake-god, who became the Greek Esculapius and the Egyptian Imhotep. Brass, as it still does in Hindu caste-rules, denoted purity, sacred serpent, were made of brass. That Esculapius was an Eastern and phallic god is shown by the cock, an Eastern bird, being sacrificed to him, and by his having his hand entwined by a serpent. The later Jewish altar, or perhaps the earlier if Ezekiel is older than Leviticus, seems from Ex. xl. 42 to have been a stone altar.

¹ Śat. Brāh. iii. 7. 1. 28, vol. xvi. p. 174, also the description of a "linga," quoted from Varāhamihira by Alberuni in his *India*, Sachau's edition, vol. ii. pp. 103, 104, where it is shown to be octagonal and phallic, fitted on to a quadrangular base inserted in the earth, the octangular portion being a reduplication of the quadrangular, showing that the eight Agnis or Vasu were the four doubled.

² Śat. Brāh. iii. 8. 1. 16, vol. xvi. p. 190.

³ The Scandinavians "reddened, i.e. fertilized, their altars with blood for the bettering of the year." St. Olaf, quoted by Du Chaillu, *The Viking Age*, vol. i. chap. x. p. 345.

earliest method of killing the victim by striking it on the forehead did not involve the use of the consecrated stake, which was a later addition of the linga worshippers.

Historical Evidence arising out of the Sacrifice to the Mother Earth.

We thus see that human victims were the first sacrifices made to the mother earth; that the human sacrifice was afterwards succeeded by the offering of animals as a ransom for the sacrificer; and that then successive changes were made in the ritualistic methods, (1) as to the animals offered, (2) the mode of killing them, (3) the consecration of the altar and sacrificial inclosure, which must, under the very conservative customs of ancient days, have taken a very long time, as well as many changes of sacrificing rulers,¹ to effect. These changes will be further exemplified when I come to speak of the sacrificial animals. But all this long series of revolutions and reformations had in the time when the Brāhmaṇas were written become a matter of long past history, as the sacrifices then offered were for the most part not living victims, but vegetable offerings. But before dealing with this branch of the question I must, in completing the account of the sacrifice to Rudra Triambakāḥ, show that it must be a reproduction, not of the earliest form of earth-worship, but of one dating from a time subsequent to the rule in India of two previous ruling races.

Ambikā, who is said in the Śatapatha Brāhmaṇa to be the sister of Rudra, is undoubtedly one of the three sisters Ambā, Ambikā, and Amvalikā, who are called in the Mahābhārata daughters of the king of Kaśi (Benares), and who play such an important part in the mytho-historical legends of the poem. Two of these sisters, Ambikā and Amvalikā, were the wives of Vichitra Virya, the second son of the great Śantanu, and on his death without heirs became, by the

¹ Great changes such as those noticed required at least a new dynasty, if they did not involve a total change in the ruling tribe.

Rishi Vyāsa (which means he who puts together, the uniter or compiler), the mothers of Dhritarāshtra and Paṇḍu, the fathers of the Kauravyas and Paṇḍavas, Ambikā being the mother of Dhritarāshtra and Amvalikā of Paṇḍu.¹

According to another myth they were the mothers of Jarasandha, king of Magadha, the father being the Rishi Chandra Kuśika (the moon of the Kuśikas), who by making a mango (am) fall into the laps of the two queens, made them each the mother of half the future king. The two halves were united by a Rakshasa, an aboriginal woman called Jarā (old age).²

Ambā, *i.e.* Amma the mother, the eldest of the three, was carried off with her sisters by Bhishma, the eldest brother of Vichitra Virya, from the princes assembled at Kāśi, but obtained her release by saying that she was engaged to be married to the king of Saubha, the mythical city of the sorcerers situated in the heavenly regions.³ In a subsequent legend this king, called there Śālwa, is said to have rejected her, because she had been carried off by Bhishma. She consequently first became an ascetic, and was afterwards changed into a river in the country of Vatsabhumi or Bundelcund, which was the home of the Sāka or cattle-herding tribes. By the help of Śiva she was reborn as Śikhandin, the child of Drupada, king of the Panchālas, who was destined to kill Bhishma. In her new birth she was first a girl, but afterwards, to fulfil her destiny, became a man.⁴

This last myth gives valuable proof of the course of religious evolution. Bhishma, the son of Śantanu by the river-goddess Gaṅgā, was Dyū, the eighth Vasu, the sun-god.⁵ It was he who tried to overcome the Great Mother (Ambā), but she remained constant to her former husband Śālwa, who is evidently the Sal tree, representing the phallic

¹ Adi (Sambhava) Parva, lv. and lvi, pp. 319-323.

² Sabha (Rajasuyarambha) Parva, xvii, pp. 54-57.

³ The city of the Daityas, the sons of Diti, the great mother, the second month of the lunar year. Drona (Dronabhisheka) Parva, xi, p. 32.

⁴ Udyoga (Amvopakhyaṇa) Parva, cxli.-cxliv.

⁵ Adi (Sambhava) Parva, xcix, pp. 295-297; also Part II. of this Series, J.R.A.S. April, 1889, pp. 304-305.

god of the aboriginal tribes.¹ By the help of Śiva, the god of the linga, she conquers Bhishma, the sun-god, who had for a time appeared to overcome the ancient deities, and is changed from the virgin-mother to the Virāj or bisexual god and goddess, uniting the attributes of Śiva and Umā, and being worshipped as the mother earth, the Tāra Durgā and Parvatī of popular mythology. But the whole series of tales about Ambā, her two sisters, and their fortunes, gives not only the history of religious change, but a complete account of the succession of races who inhabited and ruled India. Whatever may be the meaning of the name Santanu,² the great king who married the river Gaṅgā, there can be no doubt that those of his two sons by Satyavati (the possessor of Satya, truth), the Matsya princess, are merely, like that of Bhishma, mythical names, and that they represent the succession of ruling races. Their names are Chitrāṅgada and Vichitra Virya, and the whole story of their rule, death, and the birth of their heirs, is evidently mythical in form. Chitrāṅgada, which means the variegated or coloured (chitra) bracelet (aṅgaḍam), is, as I have shown in Part II., a name for the moon-god,³ and the story in the Mahābhārata, that he was killed by the Gandharvas, is merely a reproduction of the Vedic account of the destruction of the snake worshippers by Indra, for the Gandharvas were, as I have shown, the horse-taming Scythians and the charioteers who are known in Indian history as Gandhāri or Kuśikas,⁴ and

¹ The Kolarians of Chota Nagpore say that wherever the Sal tree (*Shorea robusta*), the finest forest tree in Central India, grows, there is their home. The religious and historical significance of the sal tree is shown in the story of the birth of Buddha. His mother was Maya, or Illusion, the name for the great mother, adopted by the philosophers, who described religious speculation as the raising of the veil of Maya. When he was born she placed herself under the sal tree in the sacred grove of Lumbini. This was the sacred ancestral tree of the Kolarian Koliyas, to which tribe his mother belonged. The Buddha was not only born under a sal tree, but died under the sacred sal trees at Kuśinagara. See Part I. of this series, J.R.A.S. April, 1888, p. 357; Fausbøll's *Jataka*, vol. i. p. 52; *Sacred Books of the East*, vol. xi. p. 85.

² Santanu appears to have some connection with Sin the moon, but I cannot at present trace the process of derivation.

³ Part II. J.R.A.S. April, 1889, pp. 197, note 6, and 320. The name "the coloured bracelet" evidently refers to snake worship, and perhaps to mother worship also.

⁴ Part II. J.R.A.S. April, 1889, pp. 190, 215, 225 and 291. But the Gandharvas are also in their heavenly aspects the Gandarwa or wandering

in one list of snake-gods who are dominants of the seasons, Chitrāṅgada appears in the same place as Pushkara, the moon-goddess of the Indra-worshippers, appears in the later list.¹

Vichitra Vīra, his brother, who succeeded him, and who, after marrying, died of a consumption without heirs, means the virile energy, manhood (Vīra), of two colours (Vi-chitra), and the whole story, when compared with that of the birth of Jarasandha, is indubitably a mythical account of the union of the two races, the Kauravya or black race, descended from Dhritāraṣṭra, with the Paṇḍavas or fair race, descended from Paṇḍu the fair prince. They were united by the help of the Rishi Vyāsa (the uniter), or in other words by Brahmanical influence.

As Paṇḍu means fair, the Paṇḍavas are necessarily the fair people, and the name Kauravya would seem to be derived from a root which appears in Sanskrit as 'kālas' black, and in the Greek *καλινός*.² This interpretation is confirmed by the account of the birth of Jarasandha, which tells the same story of the union of the two races in a cruder form. In both stories the Brahmin Rishi is the active agent, but he appears in the Jarasandha myth not merely as the "uniter," but as the moon-god, and not only as the moon-god, but as the moon-god of the Kuṣikas. Now the Kuṣikas are the sons of Kaś or Kasyapa, who I have shown in the Appendix to the present essay, in which I have traced the history of the year as a measure of time, were the people who first

stars of the Zendavesta, who were killed by Kerasāpa, the Kasyapa of the Zendavesta, and by Kutsa, the charioteer of Indra in the Rigveda. In that case Chitrāṅgada (the coloured bracelet) would mean the mother's year of gestation, and his death would represent the conquest of the mother-worshippers by the Kuṣikas, who introduced the full lunar year of thirteen months.

¹ Alberuni's India, Sachau's translation, vol. ii. chap. lxi. pp. 118, 120; Part II. J.R.A.S. April, 1889, p. 320.

² See on the whole subject Penka, *Origines Ariacæ*, chap. ii. pp. 35-43, and chap. v. pp. 99, 122-125, 137-138, where he shows by a long series of proofs that both the Aryans or white people, and the darker Turanian races whom they conquered, were called throughout Europe and Asia by names denoting colour. The name Arya he contends means the white people, and he connects the name with the Sanskrit *aryana* 'fair,' Greek *ἀργυρος* 'the white metal, silver,' *ἀργεος* 'white, shining,' and the Latin *albus* 'white.' The name Sudra he traces back to an earlier form shown in the Greek *Σείδρον*, and connects it with the root 'ska,' meaning 'darkness, shadow.'

introduced the full lunar year of thirteen months. They are the descendants of the demigod called Keresāspa in the Zendavesta, who ruled in the valley of Pishin in the Kabul country,¹ where he is to sleep till the last day. They are the race of charioteers or Gandhāri, and they are allied to the earliest worshippers of Indra as the god of the fertilizing waters.

To turn again to the two stories I began to discuss. They both clearly mean that the children of the two mothers who form the triad of the mother-worshippers were united together as one people.² This is further proved by the meaning of the words Jarā, the name of the old woman who is said to have united the two halves of Jarasandha, and by that of Jarasandha, as Jarā means old age and Jarasandha the union (sandhi) by Jarā (old age) or lapse of time. The story is merely a mythical way of saying that the black and the fair people were united together by time.

The same story is reproduced in another form in the legend of the birth of Aṣṭika, the sun-god, the eighth (aṣṭa) Vasu, whose father was the Rishi Jaratkāra (he who is growing old), and his mother of the same name was sister of the snake-god Vāsuki, the counterpart of Viṣṇu.³ This means that in the fulness of time the Aryan form of sun-worship was born by the alliance of the worshippers of Viṣṇu the snake sun-god with the Aryan Brahmins. But the Aṣṭika myth is much later than that which refers the birth of the earlier races to the great mother and the moon-god of the Kuṣikas.

But there seems to be in these stories still further ethnological evidence. The grandmother of the sons of Ambikā and Amvalikā was Satyavatī, a Matsya princess. Now a

¹ Darmesteter's *Zendavesta*, *Āhn Yast.* i. 37, *Sacred Books of the East*, vol. xxiv, p. 62.

² It is the union between the two races, the southern and northern, formed after a long period of intestine war, which forms the story of the Mahābhārata. But this union was not the earlier one mentioned in these myths. The ultimate union was that of people who had passed through a long and varied history before they finally amalgamated.

³ *Adi (Aṣṭika) Parva*, xi.-lviii. pp. 121-160; Part II. of this Series, *J.R.A.S.* April, 1889, pp. 243 and 303.

difficulty which has always puzzled me is how to account for the most powerful people in Western India, the tribe into which the great Śantanu married, and from whom the ruling races of India are said to have been descended, being called Matsya, meaning fishermen. In Part II. p. 283, I have suggested that the name was given to them by people who looked on them as an inferior race, but further reflection and deeper study of the question has convinced me that this idea is utterly wrong. The authors of the Mahābhārata never, like some of the hymn-writers of the Rīgveda, scoffed at the ruling non-Aryan races on account of their origin, and they certainly would not habitually have applied to them a derisive name. Again, the name occurs in the Rīgveda, and appears as the common Sanskrit name of a tribe, for it was the Matsya who in the great battle of the ten kings immediately followed the Turvasu in the attack on the Aryans.¹ But the Matsya certainly were not Aryans, and therefore would not have called themselves by a Sanskrit name. Therefore the name by which they were spoken of by Sanskrit writers must, if not given to them as a mark of contempt, be a translation of their own. It therefore follows that the Dravidian name translated as Fishermen means the sons of the Fish. That this was actually the case is still more clearly proved by the legend of the origin of the Matsya as given in the Mahābhārata. Their father Matsya, the brother of Satyavati, is said to have been miraculously born from the god Vāsu and the Apsara Adrikā, who was living as a fish in the Jumna, whither she had been brought by the Suktimati, the river on which Vasu's capital stood.² It will be further remembered that Ambū became a river in Bundelkūd, which was apparently the Suktimati, meaning "the dry mother," or "the pure mother," which was one of the tributaries of the Jumna.³ It therefore seems that the

¹ Rg. vii. 18. 6; Part II. of this Series, J.R.A.S. April, 1899, p. 230.

² Adi (Vansava tāi na) Parva, lxiii. pp. 174-175.

³ The meaning the "dry mother" is probably the original one, as the river in the Mahābhārata is said to be filled only in rainy seasons. She became the "pure mother" when she was consecrated by the waters of Indra. The river is probably the Charmanvati, or rather its tributary the Parvati, which means the mountain mother, and rises in the ancient country of Chedi.

ancestor of the Matsya and his sister Satyavatī (the possessor of truth) were the children of the fish-god and the mother earth. Now Dr. Sayce has shown that the Sumero-Akkadians called themselves "the black-headed sons of Ea, or Hea, the fish-god."¹ I have already suggested that the Haihaya, which is the vernacular tribal name of the most powerful section of the Indo-Akkadian linga and snake-worshippers, was connected with Ea, or Hea, the fish-god,² and the Sanskrit name Matsya, which means the fishermen, or the sons of the fish, as well as the legend of the origin of this powerful nation, confirms the truth of my conjecture. It therefore appears to be all but certain that the name Matsya is merely a translation of the Dravidian tribal name Haihaya, and that this name, for which no derivation can be found in Sanskrit, is derived from the Sumero-Akkadian Hea.

It therefore seems that two of the races from whom the sons of Ambikā and Amvalikā were descended were the Haihayas, the sons of the fish-god, and the worshippers of the mother earth. It is the legend of Manu over again, showing the origin of the race descended from the thinker, who was saved from destruction and retained alive to bear descendants by the help of the horned fish-god, and who, through the purified earth Idā, became the father of the black race assigned to him as children in the Rigveda.³ This explains the origin of the black race of the Kauravya. But the further question then arises as to how the fair or white element came in. Both the sacrifice of the Rudra Triambakah and the legend in the Mahābhārata prove that the black races, who are sons of the father called in Sanskrit Dhritarāshtra, or he who holds the kingdom, together claim descent from the mother Ambikā; while the sons of Ambā, the eldest mother, are ignored in the sacrifice, and they are in the legend treated as dead without descendants, like the moon and snake-god of the mother-worshippers, Chitrāṅgada.

¹ Sayce, *Hibbert Lectures for 1887*, p. 140.

² Part II. J.R.A.S. April, 1889, p. 264, note 4. The Hindi name for the Haihaya is "Haiobuna," meaning "buna" sons of Haio, which is almost exactly the same word as Hea.

³ Rg. i. 130. 8.

The real explanation of this apparent omission appears to be that the original mother Ambā is merged in the purified mother born of Suktimati (the pure mother), as Satyavati (the possessor of truth) by her connection with the Rishi Parashara, which took place in a mist (the form assumed by the god of the water of life),¹ became the mother of Vyāsa (the uniter), and was thus the mother earth purified as Idā was in the Manu legend. She and Ambikā must have been the first two mothers, Ambā representing the snake and mother-worshipping races, who, according to the legend, came to an end in Chitrāṅgada, and Ambikā the Kuśikas or charioteers of Kāśi, united with the descendants of the transformed Ambā, the purified Satyavati, and the whole story tells of the union of three races, the mother-worshippers, the linga-worshippers, who had become sons of Hea, the snake-god of the fertilizing waters, after the reformation made by the Indra-worshippers, and the Kuśikas, or the northern tribes.

Ambalikā (meaning the little mother), from whom the fair races were born, must have been a later addition to the first two mothers. Now in the genealogies of the Mahābhārata there is a king before Śantanu, called Janamejaya, whose three eldest sons are Dhritarāshtra, Paṇḍu, and Vāhlika, while Vāhlika again appears as the brother of Śantanu, the youngest of the three brothers Śantanu, Devahi, and Vāhlika.² It therefore seems that Vāhlika must have been the reputed ancestor of one of the ruling tribes, or he would not have been so repeatedly mentioned with the ancestors of other tribes. Böhtlingk-Roth interpret Vāhlika as meaning a native of Balkh, and the Madras, whose king Śalya was father-in-law of Paṇḍu, and one of the principal allies of the Kauravyas, were also called Bāhikas,³ while Vāhlikas and Vāhlika himself are found fighting in the Kauravya army.⁴

¹ Mahābhārata, Adi (Sambhava) Parva, cv. p. 318. Compare Rg. x. 164. 8, where the heavenly thought filled the womb of the mother earth with the divine mist from whence the sacred calf, the new year, was born.

² Part II. J.R.A.S. April, 1889, Appendix A, Nos. 18 and 21, p. 315.

³ Cunningham, Ancient Geography of India, p. 215.

⁴ Bhishma (Bhishmavadha) Parva, lxxiv., lxxv., lxxii., pp. 273, 275, 293. The death of the representatives of three generations of the Vāhlikas is described

But these descendants of Vāhlika must be the older race of northern immigrants from whom the Kuṣikas were descended, and Paṇḍu, the five sons of Amvalikā, must represent the later Scythian immigrants, the cattle-herding races, who, with the Sauvira, formed the great race of Ikshvāku, whose triumphal progress from the west to the east of India, and their conquest of the northern tribes, forms the story of the Mahābhārata. Though it is almost impossible to discriminate the races accurately among the mazes of the genealogies, one thing is clear, that the three mothers represent three races. One the ancient mother and snake-worshippers, the second a mixed race composed of the sons of Hea and the northern Kuṣikas the charioteers, and the third the Semite-Akkads, mixed with the cattle-herding Sākas, and forming the race of the Ikshvāku. These three races are again represented in the Dravidian races acknowledged by the Tamil-speaking people: (1) the Paṇḍyas, equivalent to the Paṇḍavas, (2) the Kērala or Chēra, the Kauravyas, and (3) the Kōla or Chōlas,¹ the Kolarian and mother-worshipping tribes. But the three races sprung from the three mothers appear not only in the title of the sacrifice made to Rudra with the three wives Tryambakaḥ, but also in the Rigveda. I have already, in Part II. of this series, dwelt on the important historical evidence to be gathered from the names of Idā, Bharatī or Mahī, and Sarasvatī, the three river-goddesses who are especially invoked in the Apri hymns.² These were doubtless the original three mothers, but the mothers greatly altered by the repeated changes made on religious and ethnical grounds. Idā was Ambikā, the mother of the

in the Drona Parva. In sec. clxiii. p. 438 Vāhlika's grandson Bhuriṣṭras bearing a banner marked with the "yūpa" or sacrificial stake (showing that the custom of tying the victim to a stake came from the north) was killed by Sātṛaki, the grandson of Sini (the moon-god). Shortly after (sec. clvii. p. 604) Vāhlika himself was, with his nine sons, killed by Bhima. The tenth son, Somadatta, father of Bhuriṣṭras, was killed (sec. clxii. p. 523) by Sātṛaki, aided by Bhima.

¹ Caldwell, Comparative Grammar of Dravidian Languages, p. 16, gives different forms of this word Chōḍa, which appears in the Asoka Inscriptions, Telugu Chōḷa, Tamil Chōra or Sora. He says they are the original inhabitants of Coromandel, and gives in another list of races a fourth race Kōla. As the Dravidians so often soften the guttural, it would seem that Kōla was the original form altered by Dravidians into Chōḷa, and that it must mean the Kolarian tribes.

² Part II. J.R.A.S. April, 1889, pp. 285-287.

Kauravyas, the black people descended from Manu. This was a very mixed race, formed from unions between the descendants of the worshippers of the original mother Ambā or Mahī, the Kuṣikas, and the Haihayas, the sons of the fish-god Hea. Mahī or Bharatī was the original mother Ambā, from whom the first Dravidian immigrants, the mother-worshippers, the earliest snake and linga-worshippers, and the Kolarian tribes assimilated by them, claimed to be descended. Sarasvatī (the possessor of speech, *saro*) was the mother of the Aryans, and of their allies the Scythian tribes settled with them on the Sarasvatī. That they were from a very early period intimate allies is proved by the narration in Rg. iv. 30. 18 of the battle on the Sarayu or Satlej between the Aryan Arṇas and the Scythian Chitraratha on one side, and the Yadu Turvasu on the other, in which the Yadu Turvasu were the victors. It was also chiefly by the help of the Śiva Bhojas or cattle-herding Scythians, living between the Satlej and the Ravi, that the Aryans inflicted a crushing defeat on the northern confederacy of the Kuru-Takshakas in the battle of the ten kings.¹

Summary of the Conclusions to be drawn from the Sākamedha Sacrifice.

I have now completed the analysis of the Sākamedha sacrifice, and have brought forward my reasons for suggesting that this sacrifice, combined with that to the Rudra Triambakah, helps greatly towards proving the successive rule in India of at least six races in pre-Vedic times. These were: (1) The Kolarian tribes. (2) The first Dravidian immigrants, the worshippers of the mother earth. (3) The linga and snake worshippers, who were also Dravidians. These two races ascribed the creative and reproductive power to the bisexual material god. (4) The Kuṣikas or moon-worshippers who introduced the full lunar year, and ascribed the creative and reproductive power to the moon-goddess who ruled the lunar year. It was also this race which introduced fire

¹ Part II, J.R.A.S. April, 1889, pp. 231-234.

worship. (5) The Indra-worshippers, who were the sons of Hea the fish-god, and who were the first great religious reformers. They were allied with the first Scythian invaders, who were the Gandhāri, and who joined the Indra-worshippers in the revision of the ritual. (6) The last immigrants in pre-Vedic times were the cattle-herding Scythian tribes. The first four races appear in the *Pitṛiyajña* as the *Pitaruḥ*, *Somavantaḥ* and the *Soma Pitṛimat*, the fifth as the *Pitaro Barishadaḥ*, and the last as the *Pitaro 'Gnishvātāḥ*. Each of these immigrations was accompanied by a change in ritual and by an alteration in religious belief, which I have traced out in the successive triads.

The Evidence of Aryan Influence.

The Aryans, who have not been included in the above list, seem from a very early period to have had an active share in the successive religious changes. It is probably owing to their influence that the ruling power was transferred from the materialistic gods to the ruler of heaven, to the fire-stick, and to the god of the fertilizing waters; but all these changes were produced by them when they were half-incorporated with the tribes already ruling in the country before their advent, and they did not appear as a distinct and separate nationality till they settled on the *Sarasvatī*. Throughout their whole history their influence, when peaceful, seems to have been wholly based on a policy of compromise. Of this I have already brought forward numerous instances, but what is perhaps the most striking proof of their determination to include in their system all possible shades of doctrine is shown in their attitude towards mother-worship. I have already drawn attention to the great stress laid by ancient ritualists on continuity of worship, and this would appear to have been disregarded in the sacrifice to *Rudra Triambakah*, but this is certainly a wrong impression. Though the sacrifice was one performed with maimed rites, yet it only shows one side of the question, for, as shown in other places, in proofs already adduced and in others to be

adduced hereafter, the mother earth, both as Idā the purified mother and as Kadru the mother of snakes, was regarded as the greatest and oldest among the gods. The legends also tell of the great reverence paid to her as Satyāvati the possessor of truth, and point to an early alliance between the Aryan Brahmins and the Nishadha or mother-worshipping tribes. But the most cogent proof that she was regarded as the god of gods, enshrined in the holy of holies, and only to be revered in solemn silence, and without the materialistic pomp of ceremony, is to be found in the Upanishads. There it is said that the divine syllable AUM is the most sacred invocation in the whole ritual, and this is merely a mute adoration of the three mothers. This is actually asserted in the Praśna Upanishad, where AUM is said to represent the three Mātras, A meaning the earth, AU the Soma world, *i.e.* that of the moon-worshippers, and AUM the light and the sun,¹ *i.e.* the sun-worshippers; and I have already shown that the earth, the moon, and the sun, were all originally goddesses.

Evidence as to the Connection between the Worship of the Great Mother and the Measurement of Time.

No account of the history of the evolution of religious belief, which began with the deification of the mother earth, would be complete without a proof of the connection between mother-worship and the measurement of time. I have gone so fully into the history of the origin of the mother's year of ten months in the Appendix, that I need not now discuss this part of the subject, and all that I shall do here is to point out how this earliest sacred period is especially connected with the worship of the mother earth. I have already shown how in the sacred triad the moon-goddess took the central place, which was originally assigned to the bisexual

¹ Praśna Upanishad, v. 3-5; Max Müller's translation *Sacred Books of the East*, vol. xii. p. 282. See also *Institutes of Vishnu*, iv. 10, p. 182, where Om is said to contain these three letters. This Vishnu-amṛiti is believed by Professor Jolly and Bühler to be the ancient Dharma Sutra of the Kārāyaṇyākāthaka Sākhā of the Black Yajur Veda, *Sacred Books of the East*, vol. vii. Preface, p. 12.

power, and it was as a goddess that she continued to be regarded as the measurer of time. It was in this capacity that she was the especial patron of mothers, and presiding over child-birth was always thought to be one of the chief duties of the moon-goddess. It was doubtless as the guardian of the mother's year that the Latin Juno and the Greek Hēra were originally regarded as supreme gods, and it is Sinivali the moon-goddess who is especially invoked in the Rigveda as the giver of children.¹ But the connection between the serpent or linga-worship and the moon-goddess is most distinctly shown in the Brāhmaṇas, in the rules laid down for two of the principal religious ceremonies in the Hindu ritual, the Agnyādhāna or the consecration of the sacred household fires, and the great Soma sacrifice. Both these sacrifices are ordered to terminate with the recitation of a hymn of the Rigveda, called the Rik verses of Kadrū the queen of the serpents, who is said in the ritual to be the earth.² In the Agnyādhāna ceremony this hymn is ordered to be muttered,³ and in the Soma sacrifice to be chanted inaudibly.⁴

These verses are said to be addressed to the sun-god; but if this were the case, they would have been chanted loudly, and not in a low voice like the invocations to Prajāpati and the older gods;⁵ and it seems to me there can be no doubt that these verses are really addressed to the moon-goddess. The hymn is thus translated by Prof. Eggeling in his translation of the Śatapatha Brāhmaṇa: ⁶ "Hither has come that spotted bull, and has settled down before the mother and before the father on going up to heaven. She (Grassmann translates He) moves along through the luminous spheres, breathing forth from his breath; the mighty (bull) has illumined the sky. He rules over the thirty domains, and song is bestowed on the winged one, yea with light at break of day."

¹ Rg. x. 184. 2, Sinivali is the name given to the new moon in the Aitareya Brāhmaṇa, 7. 2. 11, Harg's translation, vol. ii. p. 458.

² Rg. x. 189; Śat. Brāh. iii. 6. 2. 2, vol. xvi. p. 149.

³ Śat. Brāh. ii. 1. 4. 29 and 30, vol. xii. pp. 301-302.

⁴ Śat. Brāh. iv. 6. 9. 17, vol. xvi. p. 451, note.

⁵ Śat. Brāh. i. 6. 3. 27, vol. xii. p. 170.

⁶ Śat. Brāh. ii. 1. 4. 29, vol. xii. pp. 301-302.

Now the bull (or cow)¹ who illumines the sky and moves through the luminous spheres may either be the moon moving through the Nakshatras or the sun through the constellations of the Zodiac. The sun could scarcely be called the spotted bull (or cow) by those who merely looked at it with their naked eyes, and had not seen it through a telescope, whereas the epithet is one that would be readily applied to the moon. The lunar sacrificial animals are all black spotted with white, like the Egyptian bull Apis, the black-spotted goat sacrificed in the Hindu ritual to Soma,² and the black-spotted spit-ox to Rudra.³ In the case of the moon the spots are reversed, being dark upon white; but the connection between the moon and spots is clear.

But the reference to the song bestowed on the winged one gives still stronger proof that it is the moon-god who is addressed in this hymn. This certainly points to the legend which tells how the sacred falcon or eagle flew to Soma the moon and obtained thence the Gāyatri metre, which he brought down from heaven.⁴

It is also the moon, and not the sun, which rules over the thirty spheres or stations, which are those of the moon in her monthly circuit round the heavens. I have shown fully in the Appendix that the original Nakshatras were the constellations or stars traversed by the moon in her monthly course. There were twenty-eight, as long as the lunar years of ten first and thirteen months afterwards were the accepted measures of time, but they became thirty when, by the introduction of the solar year, the month was made to contain thirty days. It is this number which, as I have shown, are used in the Sirozāhs of the Zendavesta and the Babylonian Calendars, and in no case could the number of thirty stations be assigned to the passage of the sun through the signs of

¹ There seems to be a doubt as to the gender. If Prof. Eggeling is right in translating the pronoun *one* as feminine, it seems the same gender should be continued throughout the poem.

² Sat. Brāh. iii. 4. 23, vol. xvi. p. 83.

³ Aśval. Grīh. Sūtra, iv. 8. 5, Sacred Books of the East, vol. xxix. Oldenberg's translation, p. 265.

⁴ Sat. Brāh. i. 7. 1. 1, vol. xii. p. 183. In Rg. iv. 27, it is Soma the divine drink which is brought down from heaven by the eagle.

the Zodiac; and they must represent the earlier forms of the Zodiacal circle, which, as I have shown, were framed for the computation of the motions of the heavenly bodies, which were determined by the division of the heavenly circle into ten divisions first, which were afterwards increased in number.

But the connection between the number thirty and the worship of the mother earth is most clearly shown in the ritualistic use of one of the Vedic metres called the *Virāj*. This consists of thirty syllables or three times ten, and in the ritual of the animal sacrifice it is ordered that the hinder part of the altar shall be made thirty steps wide, as representing the *Virāj* metre.¹ The reason given is that the altar means the woman, and must therefore be broader behind than in front, and the measurements assigned are thirty steps for the western or hinder side, twenty-four for the eastern, and thirty-six for the length. The interpretation to be given to the measurements is made certain by a second order in the ritual, immediately following the first, allowing the number of steps to be increased to thirty-three, the reason given being that there were two forms of the *Virāj* metre, one of thirty syllables and one of thirty-three syllables.² I have already shown that the number thirty-three represents the thirty-three gods of the earliest year, based on the lunar months of twenty-eight days, which were the twenty-eight *Nakshatras* and the five seasons, and this being the case, the probability is that the thirty steps also refer to measures of time. But this is made certain by the numbers twenty-four and thirty-six. The first represents a pair of solar years, which were necessary, according to the ritualistic view, to represent production, and the thirty-six represents the three strides of *Vishnu* and his conquest of the old triad under the symbol of a triad of years. But if the thirty steps represent measures of time, connected with the mother earth which is the altar, the question is as to what time is represented. The thirty steps, like the thirty stations in the

¹ *Śat. Brāh.* iii. 5. 1. 7 and 11, vol. xxvi. pp. 112-113.

² *Śat. Brāh.* iii. 5. 1. 8, vol. xxvi. p. 112.

Vedic hymn, may mean the thirty days of the solar-lunar month, or they may, like the thirty-six, represent a complete triad of years. That this latter is the true interpretation is evident, when we consider that to the ritualists of the Brāhmaṇas the sacrifice, especially the great Soma sacrifice, for which this altar is made, is the year.¹ These thirty steps must therefore represent the completed triad of the year of mothers, as the thirty-six steps is the complete triad of that of the gods of the sun-worshippers. They represent three sacred periods of ten months, or rather a triple consecration of one period of the same length to each of the three mothers, just as the year of twelve months was triply consecrated to Viṣṇu.

We thus find the worship of the mother earth and of the three mothers interwoven with the earliest measures of time, and underlying the most sacred ceremonies of the Hindu ritual, the consecration of the altar for the great annual Soma sacrifice, the completion of that sacrifice, and the consecration of the household fires.

But a further evidence of the original connection between the year and the universal mother is given by the name for year in some languages, especially in the Latin. The word for year, "annus," means a ring, which is the woman's symbol, and there can be no doubt that the earliest Roman year, to which the epithet of the ring was applied, was the year of ten lunar months, the period of gestation,² which was looked on as the holy ring.

¹ Sat. Brāh. iii. 2, 2. 4, vol. xxvi. p. 37; i. 1. 1. 13, vol. xii. p. 8.

² With reference to this subject, I may note that I find it stated in Max Müller's Preface to vol. iv. of his edition of the Rigveda, p. 69, that Ibn Ezra says that the Hebrew word "Shanah" means a ring, and the same great critic also argues that the Hebrew year must have been originally lunar, because "Chodesh," a month, is derived from a root meaning "to be new." Gesenius also connects Shanah with the Latin "annus," a ring, but a Hebrew scholar has pointed out to me that the root from which "Shanah" is derived involves the idea of repetition, recurrence, and that this may have produced the annular idea connected with the word. It certainly seems to have some connection with Sin, the moon, and so does the Greek *ἔτος*, a year, where the aspirate may probably be connected with an initial *s*, and in that case both names would be derived from the moon. But neither of these two possible explanations is applicable to the Latin "annus" of ten months, which could not be said, like the completed year, to recur by beginning again when the ten months were ended.

Further Evidence as to the Worship of the Mothers and Fathers in Western Asia and Europe.

In the previous references I have made to the worship of the mother earth in these countries, I have only spoken of it as connected with human sacrifices. But we find that not only was the mother earth worshipped as the one goddess, who was the mother of all beings, but also that three mothers were worshipped. These appear as the Erinyes of the Greeks and the Nornas of the Scandinavians, and the further fact that the triple division of the three mothers preceded the same division of the fathers, is shown by the original meaning of the three mothers being lost in the mists of early mythology, while the three fathers and the three tribes descended from them appear amongst all nations who have Aryan blood in their veins. We find also among the Jews, who probably are Arianized Arabs, Shem, Ham, and Japhet, with their descendants.¹ The Greek tribes of Dorians, Æolians, and Ionians, and the three Roman tribes of Ramnes, Titicuses and Luceres may have a similar origin.

But the worship of the three mothers, though it preceded the worship of the three fathers, only marks a somewhat late stage in evolution. The original worship was that of the mother earth, which continued till Greek history began, and long afterwards to be universally diffused throughout Western Asia and Europe. Among the Akkadians the earth was worshipped as Davki or Davkina. She was once, as Dr. Sayce shows, an independent goddess, but in the later ritual which he cites she was the wife of Hea the water snake-god.² That is to say she was, like Idā the goddess, purified by the fertilizing waters of heaven, and stood to Hea in the same relation as Prithivi did to Indra in the Vedic mythology. To the people of Western Asia she was originally Cybele the mother earth, but under the reformation of the Indra or

¹ Adah and Zillah certainly seem to represent two of the three mothers among the Jews, and the third may appear in Naamah; see Appendix for the discussion of the question. If the division into three was not Aryan, it was the earliest division among the Turanians, and must have been connected with the sacred triad. Among the later Turanians five was the sacred number.

² Sayce, Hibbert Lectures for 1887, p. 139.

rather of the Hea worshippers, which penetrated to the coasts and islands of Asia Minor and Greece, she became the Cyprian Aphrodite, and the Aphrodite of the poets, who, like Idā in the legend of Manu, rose from the waters. The older earth goddess of the Greeks was Demeter, who always represented the mother earth. This same goddess was also worshipped in Egypt as Isis the mother, for though her name means in Egyptian the exalted venerable or ancient one, it is, as Prof. Tiele has pointed out, probably connected with the Akkadian *Isi* the earth.¹

But though the coincidences between Indian and Greek ritualism, as shown in the successive changes in the worship of the universal mother, do not end here, yet space does not permit me to pursue this branch of the subject much further, and I will end by pointing out what is apparently the most remarkable coincidence of all, and one which seems to me to give almost conclusive proof that the original sacrifices to the mothers and fathers had both been established as the great festivals of the later autumn season, before the ancestors of the Hindus and Athenians separated from their common ancestral home. In the *Brāhmaṇas* this sacrifice is ordered to be performed in *Khartik*,² which was the last month but one of the ancient lunar year. But this month *Khartik* was the month dominated by the constellation of the *Kṛttikas* or *Pleiades*, and was especially sacred to the Semite-Akkadian worshippers of *Vishnu*. The connection between these people and the *Kṛttikas* is most conclusively shown in the arrangement of the *Nakshatra*, which were especially altered by them so as to make the year begin under the *Nakshatra Kṛttika*. We can, owing to the wonderful discovery made by the acuteness of Mr. Bentley, give the exact date when this change took place.³ Mr. Bentley, in his researches into ancient Hindu astronomy, found in the *Vayu* and *Linga Purāṇas* a legend which told how *Daksha*

¹ Tiele, *Outlines of the History of Ancient Religions*, pp. 48 and 53.

² *Sat. Brāh.* vol. xii. Preface to *Seasonal Sacrifices*, p. 384.

³ See Bentley's *Historical Review of Hindu Astronomy*, Calcutta, 1823, quoted by Max Müller, Preface to vol. iv. of his edition of the *Rigveda*, pp. 30-33.

gave his twenty-seven daughters, who were the twenty-seven Nakshatras, in marriage to the moon. Four of these daughters brought forth four of the planets: Rohinī the planet Mercury, Maghā Venus, Ashadhā Mars, Parva phalguni Jupiter; whence Mercury was called Rohinya, Venus Maghabu, Mars Ashadhabhava, and Jupiter Parvi phalguni. This special connection between these planets and the Nakshatra months, occurring at different periods of the year, seemed to Mr. Bentley to represent some special astronomical relation between them and the moon. This connection he thought might be their occultation. He accordingly calculated back the places of the moon and these planets, and found that in the years 1425 and 1424 B.C. they were brought especially near to the moon's path, and that similar conjunctions could not possibly have taken place since that time, nor for many thousands of years before. He thought, therefore, that these years must have some special connection with the arrangement of the Nakshatras, and he accordingly found that in the year 1426 B.C., or the year before these conjunctions, which were called the birth of the planets, the vernal equinox took place in Khartik, and as the solar year began with the vernal equinox, this must have been the year in which the official list of the Nakshatras, beginning with the Krittikas, was drawn up.¹ That this arrangement was made by the Vishnu-worshippers, or the Semite-Akkadians, who introduced the solar-lunar year, is proved by the fact that they hold the Dībālī, their special festival, which is to the people of Western India what the Durgapūja is to those of the East, on the new moon of that month, and it is then that they celebrate the beginning of the year, which was originally fixed at the time of the vernal equinox.² But

¹ Prof. Max Müller obtained a verification of Mr. Bentley's calculations from Mr. Hind, of the Greenwich Observatory. Mr. Hind found that only Jupiter was occulted, though the others were in ecliptic conjunction with the moon. The several dates of these conjunctions were as follows: Venus, about August 20th, 1425 B.C.; Mercury, April 17th, 1424 B.C.; Jupiter, April 22nd, 1424 B.C.; and Mars, August 18th, 1424 B.C.—Preface to vol. iv. of his edition of the *Rig-veda*, pp. 85-87.

² But their original year is said by Alberuni, vol. ii. p. 9. Sachau's translation, to have begun in Mṛgadāśha, when he says the year of the people of Sindh and Kanauj used to begin before it was altered to the new moon of Chait on the

these people could not have been those who took their religion from northern sources, for the ruling constellation of the northern tribes was, as we know from the *Zendavesta*, the *Haptō-iringas*,¹ the seven *Rishis*, the great Bear; and the people who were under the influence of the *Pleiades* must have been a more southern race, for all the civilization of India came only from two centres, from the Persian Gulf and the country of *Irān* on the north. But these people were also adorers of the great mother, for the leading star of the *Pleiades* is *Ambā*.²

But that this transference of the autumn festival to the fathers, to *Khartik*, is one of the numerous changes in the ritual made by the *Vishṇu*-worshippers, who made *Vishṇu* the guardian of the year instead of *Prajāpati*,³ is also proved by the fact that throughout Bengal and Eastern India the festival now is always held in the autumn. There the *Durgapuja* takes place on the seventh day of the new moon of *Aṣvin*, and the festival of the *Pitris* or fathers ends on the new moon day preceding it, which ought to fall in the tenth month of *Bhādon* or *Bhādrapadā*. But even this arrangement does not take us back to the earliest ritual. The sanctity of the month of *Aṣvin* is a relic of the rule of the *Kuṣikas* or charioteers. It was to them that the *Āṣvayajau* or twin horsemen, whose names are preserved in the month, were sacred, and it is these twin horsemen whom we find regarded as deities throughout all ancient mythologies. The old name of the month of *Assim* or *Āṣvayaja* was *Kuar*, from *Ku* the earth, and this name is still universally used as that of this month throughout Central India. In *Chuttisgarh*,

introduction of the solar year. But this statement, which is opposed to all the ancient evidence which makes the lunar year begin in *Pūsh*, is explained in the *Mahābhārata*. There (*Bhishma* (*Bhagavatgita*) *Parva*, *xxiv.* p. 115) *Kṛishṇa* (*Vishṇu*) says, "I am *Mrigashirsha*," that is, that month is sacred to me. That means that he ruled the closing month of the lunar year which was formerly sacred to *Śiva*, and it was at the end of this month that the new year began with the new moon of the succeeding month, *Pūsh*.

¹ Darmesteter's *Zendavesta*, *Strauch*, i. 13, *Sacred Books of the East*, vol. *xxiv.* p. 9, and many other places. They were the seven holy stars made by *Mazda*.

² *Tait. Saṁh.* iv. 5. 1; *Tait. Brāh.* iii. 1. 4. 1; *Max Müller*, Preface to vol. iv. of his edition of the *Rigveda*, p. 32.

³ *Śat. Brāh.* i. 2. 13, vol. *xii.* p. 15; i. 4. 5. 3, p. 128; iii. 4. 4. 15, vol. *xvi.* p. 168.

which is the country where the old Haihaya rule lasted longest, it is in Kuar that the festival to the fathers takes place, and it must have been fixed in that month on account of its being specially dedicated to the twin brethren. But even in Chuttisgurrh we find an older system than that of the Haihayas; and there, as in Chota Nagpore, the festival to the sacred rice, the emblem of the mother earth, called the Gurhpūja, and that to the oxen representing the sacred bull and cow, called Pola, is held in Bhādon or Bhādrapadā, in the tenth month¹ of the original year, which began in January at the time of the winter solstice.

Now this same month was called by the Athenians Boedromion, or the month of the course (δρόμος) of the ox, and one of the Sanskrit names of the Hindu month is Proshthapadāh, meaning the ox-footed month, which is therefore almost exactly the same as that of the Athenian month. It was also in this month that the Athenians held the festival of the Eleusinia, in honour of Demētēr the mother earth, and it is also in this month that they held the festival of the Nekusia in honour of the fathers. Thus these Athenian festivals correspond precisely in point of time with the old Gurhpūja and Pola festivals to the mother earth and the ancestral bull or cow, and also to that of the festival to the Pitris in Bengal, and the references to the name of the ox in the month show that both the ancestors of the Hindus and of the Athenians must have regarded the ox as representing both the sacred bull and cow as most holy.

The Worship of Female Gods and Matriarchal Rule earlier than the Worship of Male Gods and the Rule of the Fathers.

If the conclusions arrived at in this discussion are correct, there is apparently no doubt that the worship of the great

¹ These festivals are called the Pola and Gurhpūja. The information here given is taken from my official report on the Settlement of the Raipore District, forming the southern part of Chuttisgurrh. In the Gurhpūja the wild rice is gathered and hung up in the ryots' houses, thus securing the blessing of the mother earth on the house. This is strictly analogous to the blessing of the house at the consecration of the household fire by the recitation of the hymn of the Queen of the serpents, Kadrū the mother earth.

mother preceded that of the father or fathers of gods and men, and therefore the first female god could not be, as is supposed by Dr. Sayce, a Semitic addition to an earlier totem worship,¹ but must have been a continuation of the earliest worship which succeeded that of local deities and totems, which was that of the one creative female principle. It is quite true, as Dr. Sayce says, that the Semite female deities are mere pale reflections of their lords, but the Semite did not create the female but placed the male gods, who were derived from the phallic gods of the linga-worshippers, above the old ancestral goddesses whose equals they had formerly been. The Semites were probably one of the earliest races who introduced into southern Asiatic countries family life and marriage, as opposed to the tribal life and the temporary unions for the benefit of the tribe, which were the leading features of the matriarchal rule. These customs they probably derived from their Aryan ancestors, for all the evidence tends to show that marriage was an original Aryan institution; and that the Semites are on one side at least of Aryan origin is proved by the inflexional forms in their grammar, which cannot be traced back to the agglutinative formations of the Turanian languages. As the Aryans are the only pure race in Europe and Asia who base their grammar on inflexions, it is most probable that they must be the ancestors of the Semites on one side, while on the other the Semites are descended from the aboriginal tribes of Arabia, who called themselves the sons of Ad.

Evidence of the Official Recognition of the Phallic Gods as Gods of Time.

Throughout the preceding discussion I have tried to show that one especial characteristic of the ruling gods of ancient nations was, that they were considered to be gods of time. I have shown that the moon-goddess, the heavenly mother, was the ruling god of the earliest year of ten months, and she was also the god ruling the full lunar year of thirteen.

¹ Sayce, Hibbert Lectures for 1887, p. 110.

But though I have nowhere found a year in actual use in which the male god is the ruling deity, there are throughout the Hindu sacrificial ordinances many traces which point to the existence of a year or sacred period of eleven months. In the official distribution of the functions of the thirty-three gods of time, we find eleven Rudras or phallic gods, and in the older animal sacrifice, which was the great yearly festival of the earliest ritualists, we find eleven victims offered. This sacrifice, as I have shown, represents the year, and in the Soma-sacrifice, in which this older sacrifice was merged, we find libations made to thirteen months of the year.¹ It therefore seems to be most probable that the eleven victims were offered to the year of eleven months, which was the longest measure of time, besides the division into seasons, which was sacred to the united linga and mother-worshippers. In all the *Apri* hymns except two there are only eleven stanzas, and as these are the official hymns prescribed for recitation at the great annual animal sacrifice, which represents the year, each of the stanzas must point to some division of the year. I have already shown that the first four and the last mean the five seasons; but if so, what do the other six mean? The addition to the original five must mean some other division of the year, and this can only be the months, which are besides the seasons the only parts of the year recognized in the text of the ritualistic manuals.

The two hymns, *Rg. i. 13* and *Rg. i. 142*, which have more than eleven stanzas, have one twelve and the other thirteen, both of which agree with the number of months in two other official years, and therefore it is more than likely that the original sanctity of the number eleven stanzas was derived from a year or sacred period of eleven months.²

¹ *Sat. Bräh. iv. 3. 1. 5* and *14-20*, pp. 318, 321, 322.

² Eleven is everywhere throughout the *Brähmanas* the number sacred to the older gods. In the Soma annual sacrifices there are eleven fore-offerings (*pravyājas*), eleven by-offerings (*upavyājas*), and eleven after-offerings (*anuyājas*) (*Sat. Bräh. iii. 8. 4* and *1*, vol. xvi. p. 310; *Alt. Bräh. ii. 18*, Haug's translation, p. 110). Sacrifices on eleven pots/bards are offered to *Prjāpati* at the *Varuna-praghāsa* or summer seasonal sacrifice (*Sat. Bräh. ii. 5. 2. 39*, vol. xii. p. 403), and the same number to *Agni-Soma* at the new and full moon sacrifices (*Sat. Bräh. i. 6. 3. 14*, vol. xii. p. 167). The thirty-three, or three times eleven, offerings at the Soma sacrifice distinctly point to the number eleven being one of the

Moreover, in the original ritual only one mother was worshipped, and the addition of the other two, Idā and Sarasvatī, who were included in the hymn, point to the subsequent addition of two mothers, to make up the full number of thirteen months of the full lunar year. These two mothers must have been added by the northern immigrants, the sons of Kug, who, as I have tried to show in the Appendix, probably introduced the full lunar year of thirteen months; but this addition was made long before the worship of Idā, the purified mother, or of Sarasvatī, the mother of the Aryans, was thought of in India, and before the tribes who are identified with these ancestral mothers had arrived in the country.

But in this year of eleven months the ruling god must have been the father, and this conclusion is confirmed by the last verse of the Aprī hymns being dedicated to Agni Svishtakrit or Rudra the phallic god, and it was as the ruler of the year of eleven months that he first obtained official recognition, and it was thus he secured his place in the popular triad of which Brāhma, who was formerly Pushkarā the moon-goddess, and Vishnu are the other members, as the rulers of the full lunar and of the lunar-solar year.

Historical Evidence as to the Origin of Phallus Worship.

In the previous essays of the present series I have brought forward overwhelming evidence to prove the universal diffusion throughout Northern India of snake and linga-worship. All the ruling races were descended from snake-gods, and the great snake Nahusha was, before the days of the worship

divisions used in reckoning the gods of time, and this conclusion is confirmed by the thirty-three gods being in the R̥gveda divided into three groups of eleven each (Bg. i. 24. 11; i. 139. 11; viii. 35. 3; ix. 22. 4). This division corresponds to the thirty-six steps given as the length of the altar, and the thirty and thirty-three steps as its breadth. I have already shown that the thirty-six steps denote the threefold reverence paid to the year of twelve months, the thirty steps to the same honours given to the year of ten, and it hence follows that the thirty-three steps, the thirty-three offerings, and the division of the thirty-three gods into three groups of eleven each, all point to a year of eleven months. Thus in the official division of the thirty-three gods into eleven Rudras, eight Vasus, and twelve Adityas, we have the two sacred years of eleven and twelve months, united by the seven sacred days of the week, with the sun-god added.

of Indra, the ruler of heaven and earth.¹ But I have now I hope proved that the worship of the great mother was long anterior to that of the snake father, and as the worship of any god as the supreme deity meant in primæval times that the tribe who regarded that god with especial reverence were the chief rulers of the country, the worship of the mother earth and the snake father, which have been so deeply rooted in all the national and religious traditions of India, must imply that the mother-worshippers and snake-worshippers were two races of differing origin, each of which ruled the country for many centuries. I shall in a later part of this essay try to show to what race the mother-worshippers belonged; but I shall first try to show the ethnology of the snake-worshippers. Their chief god must have been the universal father, and he appears as the snake-god Nabusha, and in the Brāhmaṇas as Rudra or Pūshan, the sacred bull of the Indra-worshippers. In the Mahābhārata he is Vichitra Vīrya, the reputed father of the Kauravya and Paṇḍava, the black and fair races. But the best evidence as to the race to which the original snake-worshippers belonged is to be found in a consideration of the questions connected with the origin of the Virāta, who were the great rulers of Western India known to the writers of the Rigveda and the later Sanskrit writers by the name of Matsyā or Haihayas, a name which they acquired, as I have already shown, when they became worshippers and sons of the fish-god Hea. In Part II. of this series of essays I suggested that the name Virāta might be another form of Bhārata.² Further inquiry has now shown me that this opinion is probably erroneous, and I now hope to prove that, as the Bhārata are probably the descendants of the worshippers of the great mother, called in the Rigveda Mahī or Bharatī, so the Virāta are the descendants of the great snake first, afterwards of Hea the fish-god, and finally of Idā the purified mother, who appears as their ancestress in the Rigveda.

¹ Nabusha was hurled from heaven by Indra. See J.R.A.S. April, 1889, pp. 193, 264.

² J.R.A.S. April, 1889, pp. 283-285.

Dr. G. Oppert, in a learned work on the original inhabitants of Bhāratavarsha (India), which he is now publishing in the Madras Journal of Literature and Science, gives an interesting description, taken from the Mackenzie Manuscripts, of the way in which the Idaiya Kuṛumbas of Madras worship their god Virubhadra (the blessed or holy Viru).¹ This god Viru is a representative of Śiva, and the name Idaiya appears to connect these Kuṛumbas, with the Ipāvata, who were the worshippers of the snake-god Hea, and also of Ida or Iṣa as the sacred bull or cow. The name Viru is clearly the distinctive name of the god, bhadra being merely a honorific title. Viru is undoubtedly the same word as Vīru, which appears in the name Vīru-paksha, the collection (paksha) of Viru-worshippers, used as that of one of the snake-worshipping races in Eastern India in the Chullavagga,² and both names point to the worship of the Viru or the "linga." Now these Kuṛumbas are a tribe of shepherds and hunters, very widely distributed everywhere throughout Madras, both in the Tamil and Telugu countries. They once ruled the whole of Southern India, and were especially powerful in Vizianagram, which is the Kalinga country near the mouth of the Godavery.³ Their original god was the upright stone, which was the earliest representation of the "linga"; and besides Virubhadra they worship the great mother, united with the male principle under the name Viru-Lakshmi. Sakti-worship, or the worship of the female principle, exists among them, and their religion is materialistic, and shows the union between the worshippers of the mother earth and the linga-worshippers. Among this people are to be found a tribe of cultivating Kuṛumbas, whom Dr. Oppert identifies with the Kurmis or Kuḍumbis,⁴ and he also shows the similarity of their customs with those of the

¹ G. Oppert, On the Original Inhabitants of Bhāratavarsha, part ii. pp. 237-239.

² Chullavagga, v. 6, Rhys Davids and Oldenberg's translation, Sacred Books of the East, vol. xx. p. 76; Part II. of this Series, J.R.A.S. April, 1889, p. 284.

³ G. Oppert, On the Original Inhabitants of Bhāratavarsha, part ii. pp. 218, 243-253, 239-236.

⁴ *Ib.* p. 231.

Kaurs.¹ These Kaurs I have also identified with the Kurmis.² It is to this people that the great Sivaji, founder of the Mahratta empire, belonged,³ and everywhere throughout Central India stories of the former existence of Kurmi rulers are common. These southern Kudumbis or Kurmis must have been an offshoot of the great Kuru race, who were once the ruling power in Northern India, and who under their god Kutsa, called in the Rigveda the charioteer of Indra, conquered the Gandharvas or the northern charioteers of the Kabul valley.⁴ They were the sons of Yima Khshaēta, the good shepherd of the Zendavesta, who replenished the earth with flocks and herds, and sowed the seeds from which future generations of men, women, and animals were to spring in the sacred Vara or Garden of God.⁵ He was the successor of Haoshyānga the Paradhāta, and the immediate predecessor of Keresāspa, the Hindu Kaśyapa, and of Thraētāona, the slayer of the snake-god Dabāka.⁶ It was these people who, first as shepherds and afterwards as agriculturists, came down from the north, where they acquired that knowledge of irrigation which has made the Kurmis the best farmers, the most skilful irrigators, and the most persistent diggers of tanks and makers of reservoirs in India. It was this people who used the streams to fertilize the land, threw embankments across valleys in hilly countries, dug wells in those where the rainfall was scanty, and made tanks where the country was flat and the rainfall copious. It was their god Kutsa who vanquished Shushna the demon of drought, and it was they who, as the Virāta or worshippers or sons of Viru, laid the foundations of the great empire of Western

¹ *Id.* pp. 210, 239.

² *J.R.A.S.* April, 1889, pp. 235, 236, 239, 307.

³ G. Oppert, On the Original Inhabitants of Bhāratavarsha, part ii. p. 231.

⁴ *J.R.A.S.* April, 1889, pp. 213-216; *Id.* viii. l. 11. Perhaps this refers to the institution of the lunar year, which is, in the Zendavesta (Fargard i. 10, Sacred Books of the East, vol. iv. p. 7), represented by the conquest of the Gandarewas or Pairikas, the wandering stars, by Keresāspa, the Zend Kutsa, and by his making the Pairika kōathaiti, the moon-goddess, his wife. In other words, he subjected her to order and made her rule the year.

⁵ Darmesteter's Zendavesta, Fargard ii. Sacred Books of the East, vol. iv. pp. 12-21.

⁶ Darmesteter's Zendavesta, Abān Yast vii., Sacred Books of the East, vol. xxiv. pp. 59, 61.

India, and gave a fresh stimulus to the export trade from the western ports, which had already been established by the mother-worshippers, the earliest immigrants. The people who first learnt how to cultivate and manufacture indigo, to grow and weave cotton, to rear the plants which yield dyes, and to utilize the sugar-cane, must have formed a most powerful and progressive section of the inhabitants of the great empire, the power of which was based on its internal and foreign trade; and it is not to be wondered at that the country was named after these enterprising pioneers of progress, and called Virāta, the home of the sons of Viru their god.¹

But these people, whose god was the great father, could not have been a nation who looked on the matriarchate as the ideal form of government, and to them the father as the head of the household must have been the typical ruler, and it is both in the Brāhmaṇas and the Zendavesta that we find the introduction of family life ascribed to a northern people, who eat barley and who were shepherds and fire-worshippers. In the Śatapatha Brāhmaṇa mankind were said to be delivered from Varuṇa's noose through conjugal union, (1) by the fires on the two altars to the heavenly and earthly gods, (2) by the curds offered to Indra, and (3) by the ram and ewe sacred to Varuṇa, which were made of barley meal, Varuṇa's grain, and offered at the Varuṇa praghāsa.² Now the fire-god and Indra were, as I have shown, later objects of worship than the god of the linga, the father of all beings. But it is in the Zendavesta that we find the most distinctive intimation that it was the shepherds who first introduced family life, and were the first worshippers of the great father. This is given in the Ashi Yašt recited to the goddess Ashi Vanguhi. Ashi Vanguhi is the goddess who

¹ I must not, in this short summary of some of the leading conquests of early agricultural science, be considered to attribute them to the earliest ancestors of the farming races. They must, like all other discoveries, have been the work of many successive generations, who all owed their origin to ancestors who first imbued their descendants with the spirit of inquiry and perseverance, which has continued down to the present time to animate those who followed in the track of their fathers.

² Śat. Brāh. ii. 5. 2. 5-9. 16, vol. xii, pp. 393-396.

is the especial patroness of married women, who hates courtezans or people given to the indiscriminate concubinage of the tribal organization, and impotent men; who ran away from the Turanians and Naotaras who were trying to kill her, that is to say, from the people whose marriages were only temporary unions, and hid herself, first under the foot of the bull, and afterwards, like Ulysses in the cave of Cyclops, under the throat of the protecting ram.¹ It was this same people who made the goat the animal especially sacred to the moon-goddess, who had been already deified by the mother-worshippers, who had made the gazelle her sacred animal. They must have been the mountain shepherds of Central Asia, who first formed herds of the mountain sheep and goats, and it was they who first introduced animal sacrifices as substitutes for the human sacrifices of the matriarchal tribes. They are the Kauravya among the early snake races, the Dhritarashtra or Bhārata denoting the earlier matriarchal tribes, and as linga-worshippers were the first framers of the rude sacrificial ritual in which the linga, as well as the earth, was fertilized by the blood of the sacrifice, and it was they who introduced the year of eleven months.

Historical Evidence as to the Races which Succeeded the Linga-Worshippers.

In the several analyses of the sacrificial forms accompanying certain sacrifices which have been given in the earlier part of this essay, I have shown that the moon-god was at a very early period looked on as the ruling goddess among the gods of generation, but that she was also the ruling god of the full lunar year. That this year was introduced by the people called the sons of Kuṣ or Kaśyapa I think I have fully proved in the Appendix, and what is here to be considered is the race to which these people belonged. Kaśyapa is in the Mahābhārata the son of Mārichi, meaning black pepper,² and his counterpart in the Zendavesta, Keresāspa, is

¹ Darmesteter's Zendavesta, Ashi Yašt x., Sacred Books of the East, vol. xxiv. pp. 280, 282.

² Adi (Sambhava) Parva, lrv. p. 185.

the son of Šāma, and the brother of Urvākhshāya, the great law-giver. Keresāspa extended his conquests to the Rangha or Tigris,¹ and killed the snake Srvara and the Gandhārva,² but his original kingdom was in the Pishīn valley in Kabul, where he is to sleep till the day of judgment.³ They were the people who are known as Aśvapati or Aśvaka or lords of the horse, and were the Kuṣikas or charioteers. It was they who made the full lunar year, the months of which are said in the Mahābhārata to be the thirteen wives of Kaśyapa.

They were the race called Takshakas, or builders, among the five snake races of India, and the sons of Cain and of Tubal-Cain of the Biblical narrative. They were the city builders and handicraftsmen, who are the people of the later Stone age and early Bronze age of anthropologists. Throughout the Mahābhārata they are represented as rulers of the Northern Punjab, in alliance with the Gandhāri or Scythians of the Kabul valley, who had succeeded them as rulers of that country, and they were the Vaikarna or Kuru Takshakas and the Purus or city builders of the Rigveda.⁴ They were in India the founders of the great western cities of Pushkara-vatī, the moon-city, on the Swat river, and Kaśyapura, the modern Multan. In the east they founded the great city of Kāśi or Benares, which means the city of the Kāśi, and their name is also found in that of the famous city of Kuṣi-nagara, the city (nagur) of the Kāśis, in which the Buddha died. It was these Kāśis, allied with the Malli or Kolarian tribes, who ruled one of the sections of the Vaggian confederacy, composed of eighteen tribes of Licchavis, whose capital was at Vaisālī, and of eighteen tribes of Malli, whose capital was Kuṣinagara. These Malli seem to have been a mixed people formed from three united races, the Kolarian tribes, the mother-worshippers, and the Kāśis.

In the names of the two months succeeding Bhādrapada or Prosthāpada, we find evidence of the connection of those

¹ Darmesteter's *Zendavesta*, *Rām Yasht vii*. Sacred Books of the East, vol. xxiv. p. 256, note 4.

² *Jā. Zamyād Yasht vii*. 39-41, p. 265.

³ *Jā. Aban Yasht x*. 37, note 5, p. 62.

⁴ Part II. *J.R.A.S.* April, 1889, pp. 221, 222, 238.

who gave names to the months with the twin horsemen, who were among the earliest and most widely diffused of the older deities. The month Assin or Āsvayujau is manifestly derived from them, and Khārtik, the month dominated by the Pleiades, must, as I have already shown, have been named by a pre-Aryan race. But while the name Khārtik is shown by the Tamil list of the months¹ to belong to an earlier series, that of Assin or Āsvayujau, which is *Alpesi* or *Arpesi* in Tamil, is of later origin. The earlier name of this month must have been Kuar, from *ku* 'the earth,' and this was probably the name of what was originally the eleventh month. It must have represented the male earth god in the year of eleven months. The twin horsemen, who appear to have represented first the mother and father,² and afterwards the day and the night, were the special gods of the charioteers or northern horsemen, and stand outside the religious system founded on triads, and are represented in early legends as reformers. It was they who, in the legend of Chyavana, restore the day worn out and decrepit, through the darkness of the night, to the freshness of his early youth, and bring back the son of Budju (the daylight), who had been sunk in the waters by his enemies, to the light of day.³ They were the twin brethren of Roman mythology, the Castor and Pollux of the Greeks, and would seem to be the two gods added to the original eleven gods of time to make up the full number of thirteen required to complete the full lunar year.⁴ But besides the pair of heavenly horsemen, there was another pair worshipped by the men of this age. This was the pair of fire-sticks. It was the handicraftsmen and the workers in metals who must first have deified fire, and it is these people who must have substituted the fire-god for the

¹ In Tamil it is Kartikai.

² See Appendix. They were perhaps the two fire-sticks, the father and mother of fire, as the first fire-worshippers were the people who established the lunar year.

³ *Mahābhārata*, Vana Parva, cxxii.-cxxxvi. pp. 373-382; *Śat. Brāh.* iv. i. 5. 1-16, vol. xxvi. pp. 272-277; *Rg.* vii. 68. 6. 7.

⁴ In this capacity they are probably represented by the Hebrew Jabal, the god of the shepherds, and Naamah, who were added to the old sacred period eleven months ending with Tubal-Cain, to make up the thirteen months of the full lunar year. See Appendix A.

god of the linga, and made the fire the chief agent and messenger of the gods. It is this people who must have substituted burnt offerings for the unburnt sacrifices of the earlier worshippers, and made the fire the agent to carry up the sacrifice to the gods. In the history of sacrifices we find everywhere first the unburnt sacrifice, which is divided into morsels to fertilize the land cultivated by the sacrificers, then the linga, as well as the earth fertilized by the blood of the victim; while in the third stage, after the animal has been slain and the blood poured on the earth and sprinkled on the temple and the altar, the flesh is burnt with fire.¹

The whole period marks a time of great intellectual activity, during which improved methods in agriculture, and in the manual arts, were being everywhere introduced, and this progress is further shown in the advance of astronomical science, and in the adoption of the lunar year of thirteen months, or 364 days, which approached very near to the actual length of the year. It was the age which by the Greek mythologists was represented as the age of Chiron the Centaur, who, according to Hesiod, instructed Achilles, the solar hero, and to Xenophon, the solar gods Apollo and Diana, in the rules of justice, and in the art of hunting. Others name Chiron as teaching music, the art of the lyre, and medicine, and place him before Æsculapius.²

Evidence as to the Races who introduced Indra-Worship and destroyed the Snake and Linga Gods. The First Stage of Indra Worship.

This great religious change, which appears to have been regarded by all the nations who received their religion from the Euphrates valley as a flood which killed all the wicked snake-worshippers, must certainly have been the work of a people who were influenced by a totally different set of ideas from those which dominated the minds of the early religious

¹ This is the process proscribed in the Jewish ritual, and the northern nations used also to redder their altars and temples with the blood of the sacrifices, St. Olaf, *Hermeskungla* 113; Du Chailly, *The Viking Age*, vol. i. chap. xx. p. 345.

² Lewis, *Historical Survey of the Astronomy of the Ancients*, p. 75; Hea. Pragm. pp. 175, 370, 206, ed. Marekscheffel; Pind. *Pyth.* vi. 21, ix. 29.

seekers after truth. This change is expressed in the *Śatapatha Brāhmaṇa* by saying that the gods left earth and went to heaven, being taken there by the sacrifice;¹ in other words, the explanation of the mysteries of creation was looked for in the heavens, instead of on the earth, and it was from this time that the heavenly gods were regarded as the supreme rulers, and it was the ruler of the heavens who issued laws for the earth and for all that were on it. This revolution began with fire-worship, and was continued by those who proceeded to look on the god of the fertilizing waters rather than the fire-god as the chief god. It appears to have originated, as I have before suggested, in a country where seasonal rains were liable to be frequently stopped by droughts, and in the eyes of the worshippers of the god of the creator of life, it was he who was the heavenly power who defeated the snake-god, the fiend of drought, the *Shushna* of the *Rigveda*, and the *Deva Apaosha* of the *Zendavesta*.² The conflict between the two enemies is represented in the *Zendavesta* as a battle between the white horse, *Tistrya* the dog-star, and the black horse, representing the fiend. This is a confirmation of the evidence which ascribes the change to the northern horsemen, and in *Tistrya* the dog-star we find, as I shall show later, on the fire-god.³ But this was not the god of the earthly fire worshipped by the *Takshakas* and handicraftsmen under the symbol of the two fire-sticks, but the god of the heavenly fire, who thus took the place which had been already taken by his earthly prototype, who had claimed to be the real author of the power formerly ascribed to the earthly father, the god of the *linga*. But this transformation of the gods from earthly to heavenly beings did not end here. The deification of the heavenly fire, like the original fire-worship, was probably, as I shall show, the work of the Northern *Akkadians*. But a similar change also took place among the *Sumerians* or the Southern race. The snake-

¹ *Sat. Brāh.* i. 7. 3. 1. p. 190.

² Darmesteter's *Zendavesta*, *Tir Yast*, vi. 20-34, *Sacred Books of the East*, vol. xxiv. pp. 99-102.

³ It was through star-worship that the sacred fire was transferred from earth to heaven. It was then that *Tistrya* or *Sirius* became the god of the heavenly fire.

god, Mūl-nugi, became Hea the fish-god, as in India Nabusha became Indra; and in India this change is further exemplified by those which altered the moon and earth-goddesses. The moon-goddess was no longer Sinha the mother of the sons of Sindhu, but Pushkarā the goddess, resting like the divine lotus upon the life-giving waters, and the maker of Push the bull, while Kadrū or Ambā the earthly mother became Satyāvati, the possessor of truth, and Idā, the mother purified by the waters of heaven. The Virāta, the sons of Viru the phallic god, became Haihaya or sons of Hea the fish-god, and Irāvata the sons of the sacred Idā. Among the Jews the holy people became the sons of Shem, (The name)¹ whose connection with the older moon-god is shown in the sacred Ψ , its initial letter representing the sacred trident, the ancient symbol of the heavenly triad, which had been adopted as the emblem of the sacred fire-stick. I have already shown how these three sacred marks were sanctified in the deification of the ox, the animal with the cloven or triad foot;² and the transfer of sanctity to the ox is further shown in the Hindu month Bhādrapada or Proshṭāpada, the ox-footed month. The dominant of this month is Aja Ekapād the one-footed god, or the sacred fire-stick, the *οἰδέπους* or swollen-footed god of the Greeks, who afterwards became the goat fish-god, represented by a goat with a fish's tail. Thus it was among the Irāvata or worshippers of the heavenly fire that the ox replaced the goat as the animal sacred to the moon-goddess.³

¹ Shem means The name.

² Part III. J.R.A.S. July, 1889, p. 546, note 2.

³ Alberuni's India, Sachau's translation, chap. lxi. vol. ii. p. 122. This substitution of the ox for the goat is shown in the adoption of Ahir Budhneya, the dominant god of the second Nakshatra of this month. Ahir Budhneya is explained in the Aitareya Brāhmaṇa, iii. 27, Haug's translation, vol. ii. p. 224, to mean the household fire. But Ahir is, as every one in India knows, one of the names of the cattle-herding tribes, and the god called Ahir must be the ox-footed god. Thus Bhādrapada, the blessed foot, was the name of the goat-god, Proshṭapada or the ox-footed, the name of the later god. This difference between the dominants of the two halves of the month arises from a difference of race, and a similar difference is apparently shown in the names of the Nakshatras of the month, the first Pūrvabhādrapada would be the Nakshatra of the eastern (Pūrva) people, who worshipped the goat, and whose year was the lunar year of thirteen months, and Uttarabhādrapada was the Nakshatra of the northern (Uttara) tribes, who had adopted the solar year. I have shown in the Appendix that the use of the Nak-

But though all these changes which marked the earlier phases of Indra-worship must have occupied a vast period of time, they do not seem to be the work of a race essentially distinct from the earlier mother and linga-worshippers. They were all made by the sons of Manu the thinker, the father of the black races of the Rigveda, and of the Kauravya or black races formed by the union between the mother-worshippers, the Virāta or linga-worshippers, and the sons of Kuṣ or Kaśyapa the Dhritarāshtra or Bhārata, the Kauravya and Takshaka among the Hindu snake races. It was these people who were regenerated by the new doctrines, but before they could be fully developed they had to be translated into words; till these thoughts, breathed in burning words, were thus touched with the sacred fire, they were not thought by the sons of Sarasvatī, the goddess of speech, to be life-giving and productive. Till they were thus consecrated the real effects of the change which had been begun could not be worked out. An Aaron who could speak was wanted to interpret the thoughts of Moses, who was slow of speech and slow of tongue.¹ This final development of the work of this ancient revolutionary era was undertaken in India by the Aryans, and the Northern races allied with them, who called themselves the sons of Sarasvatī.²

Second Stage of Indra-Worship.

I have in the previous pages of this essay shown the great alterations in the ritual made by the Indra-worshippers; but I have not yet described the two great changes which give unequivocal historical proof of the lasting marks left in India by the great Scythian invasion which ushered in the period of the supremacy of the Aryans, who were from the first their intimate allies. These are the introduction of the

śatras as parts of the year was caused by the adoption of a five years' cycle, to include solar and lunar years, and this evidence of the intermixture of northern and eastern or new and old world gods, in the names and dominant gods of the several Nakshatras, is additional proof of the truth of the account of the origin of the Nakshatra which I have there given.

¹ Exodus iv. 10-17.

² Part II. J.R.A.S. April, 1889, pp. 243, 267, 267, 291, 300, 322, 323, 327.

Aśvamedha or horse sacrifice, and the great addition made to the great annual festival to Sinha the moon-goddess, by making the worship of Soma, the divine drink, the leading feature in the ritual. I have already shown in this survey of the historical evidence that the mother-worshippers were in the list of ruling snake races called the Dhritarāshtra or Bhārata, the linga-worshippers, the Kauravya or Virāta, the sons of Kuṣ, the Takshakas, the earlier Indra-worshippers, the Irāvata, and we now come to the Vāsuki. These are, as I have already shown, the worshippers of the snake-god Vāsu. But besides the one god Vāsu, there are also seven Vasus, who represent the seven days of the week. Now in the older measurements of time the days of the week do not appear as sacred, that is, they were not, as I have shown in the Appendix, officially recognized as units of time measurement. The earliest evidence I have yet found showing the recognition of the week is the list of the days of the month with the gods to which they were sacred, which were found in the library of Assurbanipal. In this list every seventh day is a day of rest, and this sanctity attached to one day in the week is in the Zendavesta extended to the first seven days of the month, which include the day sacred to Ahura Mazda, and are called the Amesha Spenta or Amhaspands.¹ It was evidently the same people who consecrated the seven days of the week who consecrated the seven Vasus in India, and it was this same people who, as I shall shortly show, introduced the Soma ritual. Throughout the whole of the Brāhmanas there is evidently a constant oscillation going on between five and seven as the sacred numbers. Five is, as I have shown, the sacred number of the Southern people, who divided the year into five seasons, while seven would appear to be the sacred number of the Northern tribes. As an instance I may notice the seven potsherds offered to the Marutāḥ Krīdinah, the special companions of Indra, in the Sūkamedha sacrifice.² It was these worshippers of the gods

¹ Darmesteter's *Zendavesta*, *Sirōzah*, 1. 1, *Sacred Books of the East*, vol. xxiv. p. 2, also p. 6, note 11.

² *Śat. Brāh.* ii. 5. 3. 20, vol. xii. p. 416.

of the sacred seven days who were also the worshippers of Varuna, as the home or father of the heavenly fire, and the evidence tends to show that these people were for the most part of Aryan origin, or at all events of so dominatedly Aryan ideas as to speak an Aryan language, for the names of two of their chief gods, Varuna and Mitra, were certainly Aryan names. It was these people who divided their year into three seasons, and it was under their rule that the three seasonal festivals, the Vaiṣvadeva, the Varuṇa-praghāsaḥ, and the Sākamedha, the spring, summer, and autumn festivals, were introduced.

The Aśvamedha or Horse Sacrifice.

This was the special and peculiar sacrifice of the Sāka or Scythian tribes. In India it has always been considered to be the offering due to the gods by victorious conquerors, and the performance of a horse sacrifice was the sign by which a conquering king proclaimed his title to rule over a large number of subordinate states. But the reverence shown to the horse in Hindu ritual is not confined to this sacrifice, but appears also in the honours paid to it in other most important ceremonies. The horse is named as second to man among the sacrificial animals;¹ and in the ritual for the establishment of the sacred household fire (Agnyādhāna), the sacrificer is directed to procure a horse or an ox, but preferably a horse, and to lead it up to the fire, while the priest touches the foot-prints with the burning fire-wood three times, addressing an invocation to earth, air, and heaven.² But this ceremony is clearly a transformation made by the Sāka priests of one in the Soma sacrifice. In the Soma sacrifice the priest fills the seventh foot-print of the Soma cow as she passes into the consecrated ground with butter, saying, as he pours the sacred butter, "On Āditi's (i.e. earth's) head I pour thee, on the worshipping ground of the earth, and thou art Idā's foot-prints filled with butter."³

¹ Śat. Brāh. i. 2. 3. 6, vol. xii. p. 50; Ait. Brāh. ii. 2. 8, Haug's translation, vol. ii. p. 90.

² Śat. Brāh. ii. 1. 4. 16 and 17, 23-26, vol. xii. pp. 297 and 300.

³ Śat. Brāh. iii. 3. 1. 1-12, vol. xxvi. pp. 58-62.

It was this earlier ceremony in honour of the earth which was taken over by those who framed the rites for the consecration of the household fire; but they substituted the horse for the cow, and the sacred fire for the butter of the materialistic ritual. That this custom of sacrificing horses was, like that of strangling the victim, a Scythian one, is proved by Herodotus, who says that the Scythians sacrificed more horses than any other animals.¹ This same custom is continued by the Ugro-Finnic Voguls, who, as Reguly informs us, still sacrifice the horse.²

The Soma Sacrifice.

It is in this sacrifice that we find the most distinct traces of the influence exercised by the Sāka and Iranian races over the course of religious evolution. I have already shown how the Soma or Haoma, the divine drink, is associated with the Sākas in Darius's inscriptions, and similar evidence is given in the Śatapatha Brāhmaṇa. The story of the descent of Soma from heaven, as told there, is as follows. The sacred bird Suparṇi, the Gaḍura of the Mahābhārata, and the falcon who brought the Gayatrī metre and the spirit of poesy from heaven, was sent by Kadrū, the mother earth, to fetch Soma, the heavenly drink. Soma was under the charge of the Gandharvas, or Soma-warders, and it was from them that the sacred bird took it; and when it arrived on earth, it was Indra and Agni who preserved it for the protection of creatures.³ These Gandharvi were the people to whom the horse was sacred, and were the same as the Gandhāri, the Scythian tribes of Northern Asia, and the Indra who preserved it was not the first Indra, the counterpart of Hea the fish-god, but the later Indra called Sakra or Sakko, the warrior-god of

¹ Herod. iv. 61.

² J.R.A.S. Vol. XXI. "On the Ugor Branch of the Ural-Altaic Family of Languages," by Theodore Duka, p. 623. The custom of sacrificing horses still continues among people of Hindu origin, and strange to say an instance of it occurred two years ago at Chertsey, when a gypsy chief died, and the tribe sacrificed a horse over his grave. The horse was probably originally sacrificed for the use of the dead in the other world; but when the horse was introduced into the Hindu ritual, he became, like any other sacrifice, a ransom for the sacrificer.

³ Śat. Brāh. iii. 6. 2. 6-12, vol. xvi. pp. 160-167.

the Sūkas. This legend tells us in a mythical form how the sacred messenger of the gods brought to earth the divine drink, which was the latest form of the creative essence, which had been held to reside in the god of the *linga*, the fire-god, and the god of the fertilizing waters. The sacrifice was like that to the moon, to which it was added in the ritual of the Brāhmanas, a yearly one, and was clearly derived from the annual Scythian festival described by Herodotus, in which each year the chief of the tribe at the annual festival gave cups of wine to those who had during the year slain enemies in battle.¹ But this rude rite had, by the time the sacrifice reached India, been altered by the Iranian ritualists, and become the sacrifice described in the *Zendavesta* as offered "by the holy Zarathūstra in the Airyana Vaejah, by the good river Dāitya, with the Haoma and meat, with the baresma, with the wisdom of the tongue, with the holy spells, with the speech, with the deeds, with the libations, and the rightly-spoken words."²

When this sacrifice was brought to India, the chief place in the great annual festival was assigned to the moon-goddess, who ruled over the lunar year of thirteen months introduced by the Takshakas or sons of Kuṣ; but this sacrifice had been an addition to the earliest annual festival, in which eleven animal victims were slain in honour of the earlier year of eleven months, and these animals had been originally slaughtered after the manner of the fathers, in which they were tied to the yūpa or sacrificial stake, representing the *linga*, and stabbed behind the ear, so that the blood spirted over the sacred stake, fertilizing it and the mother earth into

¹ Herod. iv. 66.

² Darmesteter's *Zendavesta*, *Abn̄ Yast*, xxiv. 104, *Sacred Books of the East*, vol. xxiv. p. 78. The "baresma" is the sacred twig, "long as a ploughshare, thick as a barleycorn," which the sacrificer cut preferably from the pomegranate, date or tamarind tree, or any tree which had no thorns, and kept in his left hand during the sacrifice, *Zendavesta*, *Fargard* xix. 19, and *Fargard* iii. 1, vol. iv. pp. 209 and 22, note 2. In *Fargard* iii. 1. the mortar for bruising the Soma, the pressing stone of the Hindu ritual, is described as one of the sacrificial implements of the holy sacrifice. The holy wood is also included in this list, showing that the Soma sacrifice of the Zoroastrians included, like the Hindu Soma sacrifice, a burnt offering. The "baresma," which was originally a single twig, the dividing rod of Rābdomancy, became afterwards a bundle of twigs, as shown by Prof. Darmesteter in his note quoted above.

which it was fixed. This ancient ritual of the Kauravyas or Virāta was also based upon an older sacrifice, in which the animal was killed by a blow on its forehead, and sacrificed to the mother earth on unconsecrated ground. The Aryanized Scythians, who brought the later Soma sacrifice into the country, also introduced the Scythian method of killing the sacred victims by strangling them.

The sacrifice to the moon-goddess was quite distinct from that to the eleven victims offered at the great animal sacrifice. To this latter the central place of honour was assigned, and the sacrifice to the moon-goddess was first in order, while the Soma libation closed the rites. But in the earlier stages of the sacrifice the later Soma worshippers altered the old ritual, so as to make it appear that the initial as well as the closing ceremonies were performed in honour of the later Soma, the god of the divine drink; but there is little difficulty, when once the clue is found, in understanding what were the additions to the original ceremony, as every stage shows that it was to the moon-goddess that the sacrifice was first offered.

When Soma is brought to the sacrificial ground, it must first be bought, to represent the sale supposed to have been originally made by the Gandharvas. The price to be paid for it is a she-goat, which is said to be the most fertile of animals.¹ The bundle of Soma-plants, when brought, is wrapped in a shining white cloth.² It is then placed in the cart which is to carry it to the sacrificial ground on a black antelope skin, representing Āditi the mother earth,³ and the cart, to which two oxen are harnessed, is drawn to the sacrificial ground. But before the Soma enters the consecrated area, a black spotted he-goat must be offered to Agni and Soma, and this sacrifice is offered to redeem the sacrificer himself. When this offering has been made, the white wrapper is taken off the Soma plants, and they are placed on the throne of Udumbara wood, and brought into the hall as seed for the sacrificer.⁴

¹ Sat. Brāh. iii. 3. 3. 8 and 9, vol. xxvi. pp. 71 and 72.

² Sat. Brāh. iii. 3. 2. 3, vol. xxvi. p. 64.

³ Sat. Brāh. iii. 3. 4. 1-31, vol. xxvi. pp. 75-85.

⁴ Udumbara is the *Ficus glomerata*, the well-known Goolar tree of India.

Each of these separate rites is significant. In the first place, the wrapping of the Soma plants in a shining white cloth shows that in the original sacrifice Soma meant the moon, and this is more distinctly shown by the fact that a she-goat was given as a price for the later Soma. It was most probably this she-goat which was originally brought to the sacrifice with the sacred moon-plants,¹ and the whole sacrifice probably signified a union between the heavenly moon-goddess, the earth, and the phallic god. The goat is among all nations the animal especially sacred to the moon-god. In Assyria the supreme goat Azūga-Sūga was sacred to Mul-lil, the deposed moon-god.² In Egypt the Mendesian goat was sacred to Osiris, whose earliest name was Thut the moon-god.³ In Italy goats were sacrificed at the Lupercalia to Innuus a moon-god,⁴ and in Athens goats were offered to Artemis a moon-goddess.⁵ But though the goat was the animal which was, from the very earliest times, sacred to the moon-goddess, there was another victim which was dedicated to her service at a still earlier time. This was the gazelle, the animal sacred to Mul-nugi, the ancient Akkadian moon-god, which was the animal consecrated by the people of the Euphrates valley, who selected the animal who roamed over the wide plains of the Euphrates and Tigris as that which was especially sacred to the moon. It is this animal which is represented by the skin of the black antelope, which was the Indian gazelle of the Gangetic valley. This is said to represent the mother earth, which shows that the original worshippers of the mother earth came from the wide plains watered by the Euphrates and Tigris, for the gazelle and antelope both only live on plains.

But the most cogent evidence proving that Soma, the divine drink, was originally Soma or rather Sinha, the moon, is to be found in the libations offered to the months during

¹ Plants sacred to the moon, such as the mistletoe of the Druids.

² Sayce, *Hibbert Lectures* for 1887, p. 236.

³ Part III. J.R.A.S. July, 1889, pp. 543 and 541; Tiele, *Outlines of the History of Ancient Religions*, p. 48.

⁴ Part III. J.R.A.S. July, 1889, p. 556; *Encyclopædia Britannica*, ninth edition, vol. xv. s.v. *Lupercalia*, p. 96.

⁵ *Encyclopædia Britannica*, ninth edition, vol. ii. s.v. *Artemis*, p. 643.

the Soma sacrifice. These were originally offered to the moon, and formed the conclusion of the sacrifice, which was first a sacrifice to the mother earth, represented here by the black antelope skin, the great father or phallic god, and the moon-goddess ruling the year. These libations are drawn from the Dronakalsa or Soma trough, which represents Prajāpati, and Prajāpati is the year.¹ Prajāpati (the lord of created beings) is, as I have shown before, the old moon-god, and the name seems to have been given to him as uniting in himself the creative force originally conceived as the supreme deity under the separate forms of the phallic god, the moon-god, and the god of the fire-stick; and as representing the creator under these various forms, he is called in the Varuṇa Praghñāsa or summer sacrifice the great Ka or Who?² He is throughout the Brūhmaṇas, as I have before shown, said to represent the year and the sacrifice which is the year,³ and from this position he was driven by Viṣṇu, who is said also to represent the year and the sacrifice.⁴ Thus Prajāpati or Soma or Sinha is the moon-god ruling the lunar, and Viṣṇu is the sun-god ruling the solar-lunar year.

These libations to the months were drawn by the Acchāvāka priests. These are the representatives of the old priests who had, under the Ghandharvas or Kuṣikas, the charge of Soma. It was they who yielded up Soma to Suparṇi, the divine bird of song, and because they were faithless to their charge, they were at first excluded from drinking Soma.⁵ But they were retained as sacrificial priests by Indra and Agni, and were allowed to drink Soma after reciting a verse to Agni, the god of help.⁶ They also received a piece of the sacrificial cake, which in the Brahmanical ritual represented the animal sacrifice.⁷ They were clearly the old non-Aryan

¹ Sat. Brāh. iv. 3. 1. 1-6, vol. xxvi. pp. 316-318.

² Sat. Brāh. ii. 5. 2. 13, vol. xii. p. 395.

³ Sat. Brāh. iii. 2. 2. 4, vol. xxvi. p. 37; i. 1. 1. 13, vol. xii. p. 8.

⁴ Sat. Brāh. i. 1. 2. 13, vol. xii. p. 15; i. 4. 5. 3, p. 138; iii. 4. 4. 15, vol. xxvi. p. 108.

⁵ Sat. Brāh. iii. 6. 2. 12, vol. xxvi. p. 161.

⁶ Eg. v. 25. 1; Sat. Brāh. iv. 3. 1. 1, note 1, vol. xxvi. pp. 316-317.

⁷ Sat. Brāh. iv. 3. 1. 2, compared with iii. 6. 2. 12, vol. xxvi. pp. 317 and 161.

and aboriginal priests, who conducted the moon-worship when the moon-god was the chief deity, received the priests' share of the sacrifices, and distributed the portions allotted to worshippers. They were retained by the later worshippers of Agni and Indra, and still performed the duty of distribution in drawing and handing round the Soma cups.

The duties of the Acchāvāka priest in drawing these libations are thus described in the Satapatha Brāhmaṇa: "Let him draw twelve of them, twelve months there are in the year, therefore he should draw twelve (cups of Soma), but he may also draw thirteen, for they say there is a thirteenth month. Let him nevertheless draw twelve, for such is completeness."¹ In another place it is said there are twelve or thirteen months in the year.² But in spite of the hesitation in the instructions, thirteen cups are required to be taken, for in naming the months a cup for Amhaspati, the thirteenth month, is ordered to be drawn and drunk by the Acchāvāka priest.³

Historical Evidence as to the Śāka Invasion and Rule.

I have already, in a previous part of this paper, referred to the evidence in the Rigveda as to the alliance between the Śākas or Chitraratha and the Aryans or Arya, shown in the account of the battle in which they were defeated by the Yadu Turvaṣus on the banks of the Sarayu,⁴ the modern Sutlej. But there is another legend in the Vājasaneyā and Taittirīya Saṃhitās, which shows that these worshippers of the horse had extended their power over the countries of the Gangetic Doab. In this story the three mothers, Ambā, Ambikā, and Amvalikā, who were there said to be queens in Kampilya, the capital of the Panchāla country, remonstrate against being obliged to sleep with the horse.⁵ This is

¹ Sat. Brāh. iv. 3. 1. 5, vol. xxvi. p. 318.

² Sat. Brāh. ii. 2. 3. 27, vol. xii. p. 321.

³ Sat. Brāh. iv. 3. 1. 20-21, vol. xxvi. p. 322.

⁴ Rg. iv. 30. 18. The Chitraratha were the charioteers, the men of the coloured (chitra) chariot (ratha), and the Arya were the worshippers of Arasī the fire-stick.

⁵ V.S. 23. 18; Taish. S. 7. 4. 19. 1; Zimmer, Altindisches Leben, pp. 36, 37.

evidently a legendary mode of telling how the descendants of the three mothers objected to the introduction of foreign and Scythian customs connected with horsecowship, one of which was that the wife of a chief who performed a horse sacrifice was, if an heir was wanted, obliged to sleep with the horse that was to be sacrificed.

Further evidence of the Sāka invasion is given in the history of the wars of Jarasandha and the Western tribes. I have already shown that Jarasandha represented the united tribes of the Kuṣikas and Magadhas, the black Southern and fair Northern races, and it was these people who, under the Kuṣika general Hanṣa, and the two other leaders Dimvika and Siṣupāla, king of Chedi, sacked Mathura and drove the Vrishnis and cattle-herding tribes to the sea-shore.¹ It was these Vrishnis and cattle-herding tribes who were the Sāka invaders. I have already in Part II. shown that the Ikshvāku race were composed of the Sākya or Sākas, and the Sauvira.² It was these Sākas who were the allies of the Aryans on the Sarasvatī, and the war between Jarasandha's generals and the Western tribes was occasioned by the attempts made by the latter to extend their dominion eastward. This was naturally opposed by the Kuṣikas of Kāśi (Benares) and the Eastern tribes, who at first successfully resisted the invaders, but were afterwards conquered by them. This conquest resulted in the submission of the Eastern empire of Magadha with its capital at Kāśi, and the establishment of the Sākya rule with its capital at Sāketa. Herodotus's informants, who told him of the Scythian invasion and conquest of Asia Minor, said their rule only lasted twenty-eight years,³ but this must be quite unreliable. Other parts of the story, such as the acquisition of the Amazonian custom of self-mutilation, point to a long occupation of the country, but the strongest evidence as to their rule is the wide diffusion throughout Asia Minor and Europe

¹ Mahābhārata, Sabha (Jarasandha-badha) Parva, xxii. p. 69; Sabha (Siṣupāla-badha) Parva, xlv. p. 122; Part II. J.R.A.S. April, 1899, p. 211.

² Part II. J.R.A.S. April, 1889, p. 276.

³ Herod. i. 104, 105.

of the worship of Dionysus and Bacchus. If the worship of intoxicating drink as the supreme god was, as I hope I have proved, introduced into India through Scythian agency, and if the Soma sacrifice was an altered form of the analogous animal sacrifice among the Scythians, it necessarily follows that it was among them that the Dionysiac¹ myth originated, and that it was by their influence that it was diffused throughout all countries of the ancient world.

Evidence as to the Ethnology of the Mother-Worshippers.

I have now brought forward evidence to show the fundamental religious beliefs, and the origin of the Kauravyas or linga worshippers, the Takshakas or sons of Kuṣ, the Irāvata or Haihaya, and the Vāsuki. In Part II. of this series of papers, I had shown that of these races the Kauravya and Takshaka, whose original home was in the Northern Panjab, spread themselves all over Northern India; that the Irāvata ruled the whole country from Ayodhya on the east to the western ports; and the Vāsuki were the latest immigrants from the west, and that it was they who, as the Sūka Sauvira, became the great conquering race of the Ikshvāku, who ultimately extended their rule over the whole of the Gangetic valley, and held in their hands the control of the whole commerce of Northern India, and of its chief foreign outlets, the western ports of Surpāraka, Baragya, Pātala, and the eastern port of Tamralipti. But I have not yet completed the account of the oldest people of all, called in the list of snake races the Dhārtarāshtra, and in the Rīgveda the sons of Bhārata. In Part II. of this series I proved the intimate connection between these people and the Kolarian tribes, as shown in the name Bhārata. I suggested that this name was from the Bar tree or Ficus Indica, in which case the Bhārata

¹ The Dionysiac myth, like Soma-worship, originated in phallic worship. The Dionysos of the Eleusinian mysteries was a phallic god, and Herod. ii. 48 tells us that in the ceremonies of the Dionysiac festivals, the phallus was a conspicuous object. The Bacchic orgies of the women also point to the old customs of tribal concubinage, which existed before marriage. Like that of the Soma festival, the history of the Dionysiac myth is an epitome of that of the evolution of religious thought.

would mean the sons of the Bar tree. I also suggested that it might be derived originally from the Kolarian word "buru" a hill. The original home of these people I proved to be in Eastern India, where tribes still called Bauri abound.¹ But in this survey of the ruling population I took no account of the people whose name is preserved in that of Magadha, where they established an empire which is shown, by the combined evidence of tradition and of the whole subsequent history of the country, to have been for many ages the dominant power in Northern India. The original capital of this powerful state was Kāśī (Benares), which takes its name from the Kuśikas or sons of Kaśyapa or Kaś. But this was a capital city before the Kuśikas or Takshakas ruled there, and it was then the seat of the government of the Bhārata, after whom India was called Bhāratāvarsha, or the country of the Bhārata. But this powerful people, though named in the Rigveda,² and regarded as a most influential section of the community, occupy a distinctly inferior position to the Dānavas or Asuras, who are described as the principal opponents of the truth. The Dānavas or Asuras were the serpent and linga worshippers. In the Mahābhārata the two antagonists of the conquering Aryans and their allies are the two races called Daitya and Dānava. The Daitya are the sons of Ditu, the second month in the lunar year, and that the Daitya were conquered by the Dānava is shown in the legend of Agastya given in the Mahābhārata. The story is as follows: Agastya the sage, who is the star Canopus, the principal star of the constellation Argo the Ship,³ wished to marry Lopāmudra, daughter of the king

¹ Part II. J.R.A.S. April, 1886, pp. 279-284.

² There is a special Maṇḍala, the 3rd, devoted to the Bhārata, supposed to be written by Viśvāmitra, a Vedic bard, but who is really, like Prajāpati, the mythical representative of the successive ruling deities of the triad. According to the later legends of the sun-worshippers, he was the father of Ashtaka the eighth Vasa. As the son of Gādhī he was a chief of the Kuśikas, that is to say, he was the moon-god.

³ Alberuni's India, Sachau's translation, vol. ii. p. 66, quotation from Mārkaṇḍeya, a Hindu astronomer. Agastya is also (Rg. i. 170. 3) the brother of the Maruts who are also called in v. 3 of the same hymn the sisters of Indra. Agastya as the god of the Dānava or linga-worshippers must have been a ruling god before Indra, and as the brother of the Maruts he must have been the son or husband of the great mother earth.

of the Vidarbas, who ruled in the city Manimati (the mother-jewel). The country of the Vidarbas was that watered by the rivers Nerbudda and Tapti, and it was there that matriarchal rule prevailed, for the women chose their own husbands and dismissed them when they liked.¹ Lopāmudra refused to live with him till he got as much wealth as her father. He accordingly went to Trasadasyu, the son of Kutsa the Vedic hero, and ancestor of the cultivating tribes, Vradhnaśva, who must be the same as Vadhriaśva the father of Divodasa, the great Aryan champion of the Vedic Tṛtsus,² and to Śrutarvan, the king of the united Kuru-Takshakas, called Samvarana in the Mahābhārata,³ and asked them to give him the money he wanted. They told him they had none to spare, but went with him to Iḷvala (the son of Iḷa or Iḍa the mother earth) the Daitya, who they said had enormous wealth. At Iḷvala's court Agastya devoured Vātūpi, Iḷvala's brother, who used to destroy Brahmins, and from fear Iḷvala gave Agastya and his companions all the money they wanted, and a golden car drawn by two horses, Virāva (the Viru or phallic god) and Surāva (the sun-god). Afterwards Lopāmudra bore him a son called Dridadasyu, or the three Dasyus, who were the ruling races of India, answering to the Paṇḍyas, Kēralas, and Chōlas of the Tamils.⁴ This legend, while on the one hand it may represent the acquisition of the various successive races who ruled the country of wealth from the mother earth, also clearly means the conquest of the matriarchal race of the Vidarbas by the successive tribes of linga-worshippers, among whom it would naturally be expected in a legend told by Aryan

¹ Sabha (Digvijaya) Parva, xxxi. 89-91; J.R.A.S. April, 1889, pp. 274-276.

² Rg. vi. 61. 1.

³ Rg. viii. 74. 4 and 14; Part II. J.R.A.S. April, 1889, pp. 219-226.

⁴ Vāsa (Tirtha Yatra) Parva, xvi. - xix. pp. 306-314. In determining the ethnology of these Daitya it must not be forgotten that the mother river of the Mazdean worshippers was the Dāitya, the river of Airyana Vaējo where there are ten winter months, Darmesteter's Zendavesta, Farg. i. 3 and 4, vol. iv. Sacred Books of the East, p. 6. It must also be recollected that in the ritual of the seasonal sacrifices it was shown that the winter was looked on as the season when the work of producing the new year went on, and thus these ten winter months must be months of gestation. In this passage it is the production of the sacred race of the future worshippers of the true god proclaimed by Thraētmāna, the water god who killed the snakes and sanctified the rivers, that is fore-shadowed.

interpreters, the ancestor of the allied Sākas and Aryans appeared. They were all led by the pilot star of the constellation of the Ship, showing that the pioneers of the conquest came to India by sea, and it also shows that the original legend told the story of a race earlier than the fire-worshippers, whose guiding star was Tis̥trya the dog-star. This shows that in its first form the legend told of the conquest of the Daityas or mother-worshipping tribes by the first immigrants of the snake and linga-worshipping races.

But though these conquering tribes were a seafaring people, the evidence seems to show that the mother-worshipping tribes also belonged to a maritime race. The chief cities founded by the Amazonian race on the eastern shores of the Mediterranean, Askalon,¹ Ephesus, Smyrna, and Myrina in Lemnos, were all great seaports, and in all these towns the great mother was the chief goddess.² Cyprus also, the special home of the Cyprian Aphrodite, owed its prosperity to its maritime trade. But evidence which connects ships and mother-worshippers most closely together is the great reverence with which the sacred ark or chest was regarded. The Din or Chista, the receptacle of the law, was no less sacred to the Zoroastrians³ than to the Jews. But this sacred ark, which clearly represents the mother's womb, was originally among the Sumerians of the Euphrates valley, as Dr. Sayce shows, the ship of the gods in which they were carried in processions.⁴ It was only a trading people, accustomed to travel in ships, who could ever have looked on the ship as the emblem of the great mother; and as the position and history of the Amazonian cities of the West seems to show that they were founded by a maritime people, it is exceedingly probable that they were nearly related to the Sumerian people of the Euphrates valley, who made the ship

¹ Herod. i. 165.

² Sayce, Hibbert Lectures for 1887, p. 235.

³ Chista or Chisti is the Angel of Knowledge (Farg. xiv. 39, Sacred Books of the East, vol. iv. p. 216, note 4), the most upright (goddess), clothed in white, the nursing, i.e. the strongest thought of the law of Mazda, Mihir Yasht. xxi. 126, vol. xxiv. p. 153, also p. 12, note 13. She is the holy mother who bears in her womb the knowledge of the law. That is to say, she is the personified Ark.

⁴ Sayce, Hibbert Lectures for 1887, pp. 67-69.

their most sacred emblem. This is further proved by the similarity of the language of the people of Lemnos with that spoken by the Akkadians. The Etruscan inscriptions of Lemnos, which have recently been interpreted by Mr. R. Brown, are written, as he proves, in a language exceedingly similar to the Akkadian, and these people must have brought their religion like their language from an Akkadian country.¹ But if these people made their way to the Mediterranean, it is exceedingly probable that they also reached India, the El Dorado of antiquity, and it is for the evidence of this that we must now look.

I have already shown that the mother-worshippers in India are called in the Mahābhārata Daitya or sons of Diti, the second month in the lunar year. Now the second month in the popular year is not Diti, but Māgh, and the ancient name of the eastern empire ruled by the mother-worshippers is Magadha. This name is now confined to Behar, but the people have always been known as Maghas. This name is preserved in the name Maccio Kalingæ or Mugho Kalingæ of Pliny, and this race of Kalingas is divided into three sections, the Magho Kalingæ of Magadha, the people called by Pliny Medo Kalingæ, the Medo of the Monghyr inscription,² who lived in the delta of the Ganges, and the Southern Kalingæ of Hiouen Tsaang, who ruled the Eastern Madras coast as far as Pulicat.³ But the name Magadha, the country of the Maghas, as well as the fact of the existence of a large population of Mughas on the sea-coasts of Eastern Bengal, especially in Chittagong, which they formerly ruled,⁴ shows that the whole population of the lower Gangetic valley were originally called Mughas. But these people were, as I have already shown, called Burs or Bauris, and as these people once formed the largest section of the inhabitants of Magadha

¹ Etruscan Inscriptions of Lemnos, by R. Brown, jun., Proceedings of the Society of Biblical Archaeology, April and May, 1888.

² Asiatic Researches, Transactions of the Royal Asiatic Society, vol. i. p. 62.

³ Hunter's Gazetteer of India, s. r. Kalingas.

⁴ The Dosadhs of Behar, the tribe from whom the village watchmen of Behar are taken, thus showing that they belong to the original ruling race of the country, and who still keep pigs, the animal originally sacred to the northern caste, resemble the Mughas of Chittagong in being excellent cooks.

and Lower Bengal, it is most probable that they were both different names for the same people. That this was the case is further proved by the fact that the Mughias, a large predatory tribe in Rajputāna, are also called Baorias. They are called by the latter name in Marwar, to the north of the Aravallis, and by the former near Nimbhera and Nimach, to the south. They are a brave and warlike tribe, who used in earlier times to gain their living as mercenary soldiers, but are now mostly thieves.¹ These people must, from the similarity of the names, be identical with the ancient population of Magadha.

I have also shown that there is good reason to believe that there is a close affinity between them and the Daityas, who are, like them, called after the second month of the year. If so, the matriarchal tribes called Vidarba who were conquered by the linga-worshippers, whose guiding star was Canopus, were originally Burs or Maghas.² Now these Vidarbas were a seafaring people, for it was the king of the Vidarbas who founded the port of Surat, the ancient Sūrpāraka, on the Tapti,³ and the name of the Burs is preserved in that of the great port Baragzya on the Nerbudda, as well as in that of the adjoining kingdom of Baroda. They are also the Bhrigus, who, with the Yatis or Haihayas, are named in the Rigveda as living in the country of the Vrishṇi race, to whom the bards of the Kanva family were the official priests, and, as the Bharata, were the allies of the Kurus in the great battle of the ten kings against the Aryan Trtsus and the Vrishnis.⁴ But if these people were generally throughout India called Bharata or Bhars, how did they get the name of Maghas,

¹ Hunter's Gazetteer, vol. xi. p. 415, s.v. Rajputana. The Mughias say they got the name Baoria from Bauri, 'a well,' and have a legend to explain it; but the identity of the two names with those of the principal tribes of Eastern India shows conclusively that these names are both ancestral names.

² The name Vidarba may mean the two united snake races, from 'vi' two, and 'arba,' the root of Arbuda, a snake. Their country is shown by the notices in the Mahābhārata to have been the home both of the matriarchal races and the Haihayas, and it was in the Nerbudda valley that the war described in the Mahābhārata between the Bhrigus and Haihayas took place, Ādi (Chaitrā-ratha) Parva, clix. pp. 512-514; Part II. J.R.A.S. April, 1889, p. 288.

³ Mahābhārata, Vana (Tirtha Yatra) Parva, cix. p. 371.

⁴ Part II. J.R.A.S. April, 1889, pp. 285, 289, 231; Rg. viii. 3. 9, viii. 6. 18.

and is this name of Indian origin? If they were a seafaring people, they must have come by sea, and the fact that their original settlements were in the west proves that they must have come from that quarter. If so, they must have come from the Euphrates valley, whence all early maritime expeditions started. I have shown that their rivals and conquerors, the Haihayas, got their name from the god Hea, the Sumerian snake-god. Like the name Haihaya, the name Magha has no derivation in Sanskrit, and the very fact that it is, like that of the Haihayas, only used as the name of a conquering race, renders it probable that this was a name they brought with them from their native country. When they were once become indigenous to India, they called themselves Bārata or the sons of the Bar tree, just as the Haihayas changed their name from that of the sons of Hea to the Mataya or Fishermen on the Virāta.

Now there is another country besides India which was much frequented by the early navigators of the Euphrates valley, for the same reasons as those which first induced them to visit India. This is the Sinaitic peninsula called Magāna in Akkadian inscriptions, and it was from thence, as from India, that gold and jewels were procured in ancient times. In the tablets of Narain Sin, the son of Sargon, who lived 3750 B.C., the conquest of Magāna is recorded, and it was thence that the much earlier inhabitants of the ancient Telloh brought the diorite used in the statues now found on its site. These must have been brought by sea.¹ Now as these people called the Sinaitic country, which they always regarded as the holy land of Sinai, the mountain sacred to Sin the moon, Magāna,² it is exceedingly probable that they would also call their western treasure land by the same name. But such names as these were in early times gener-

¹ Sayce, Hibbert Lectures for 1887, pp. 31-33.

² The sanctity attached to the land of Magāna is shown in the Bible. It was there, at Mount Horeb, that Moses first formed the great conception of the consecrated Jehovah, and it was from Sinai, the sacred mount of Magāna, that the law was promulgated. The religion there preached was a return to the unity of the godhead, which was a fundamental tenet of the ancient mother-worshippers, who first worshipped the uncreated and creating earth, and afterwards the moon-goddess, the ruler of heaven and earth, from whom the earth received her power.

ally the names of a tribe; and if so, the name *Magā*¹ must have been in early times that of the Akkadian race. Now the modern name of the ancient city of *Ur*, the great city of the Sumerian race, is *Mughir*. This means the city (*ir*) of the *Mughs*. The Semitic *Ir* is evidently the same word as the Akkadian *Ur*, which meant both 'dog' and 'city' (with which, by the way, should be compared the Tamil *ūr*, city). This name, *Mugh-ir*, therefore points to an ancient *Mugh-ur*, and it is thus that the modern name includes, as is often the case, the ancient name of the race who founded it.² This makes it probable that the ships of *Magan*, mentioned in Akkadian inscriptions, may be the ships of the Sumerian *Magas*.

But there is also a name of *Indra* which seems to confirm these conclusions. This is *Mughavan*, a name by which he is constantly called in the *Rigveda*, and which appears in the *Mahābhārata* as *Maghavat*.³ This is usually translated 'mighty,' but its natural meaning is born of or accompanied by *Magha*. Therefore, just as *Haihaya* means the son of the fish-god *Hen*, *Maghavan* or *Maghavat* would mean the son of *Magha*; and as the early tribes named themselves after their chief god, who was their ancestor, the ancient *Maghas* would be sons of *Magha*. *Indra* is said, *Rg. iv. 18. 10*, to be born from the sacred cow, and in *Rg. vii. 20. 5*, to be born from the mother of men, that is, *Idā*, or the great mother, while in *Rg. x. 101. 12*, his mother is said to be *Nishtigri*, who is said by the commentators to be the mother earth. *Maghā* is also a name of the wife of *Śiva*, who is the mother earth, and the planet *Venus* is, as I have shown, called *Maghābhū*. The epithet *Maghavat* would thus mean the god born of the mother earth called by the name of

¹ The name of the *Magi* also seems to show that this was an early name of the Sumerian race, for the religion of *Zarathustra* is, as I have shown, derived from that of the *Asura*, the ancient Sumerians, and as their holy men were always called *Magi*, the name probably was one which was derived from a Sumerian tribal name. They were the original magicians or sorcerers, and sorcery and witchcraft was a distinguishing mark of the earliest religions, a sign of the fear of the unknown and inexplicable.

² See, *Hibbert Lectures for 1887*, p. 42. *Mugh-ir* is a similar compound to *Ir-Nahush* in *1 Chron. iv. 12*, which is the city (*Ir*) of *Nahush* (the Serpent), the exact equivalent of the Hindu *Nāgapūra*.

³ *Rg. viii. 2. 13, iii. 5. 3. 14*, and many other places; *Mahābhārata*, *Adi Parva*, *ixiii. p. 173*.

Magha. But there are other names of the planet Venus, which also show a special relation between it and Indra, and also between the planet and the Bhāratas, who are the Maghas, and the Dānavas, who are the snake-worshippers, for she is called Śukra, which is one of the names of Indra, Bhrigu, Bhriguputra, and Bhārgava, all meaning that she is the god or goddess of the Bharatas and Dānava-guru, that is, the "guru" or teacher of the Dānavas; in this last epithet showing that the Maghas or sons of the great mother preceded the Dānavas or snake-worshippers.¹ The original god Indra, as I have shown, came from the Euphrates valley, where he was Hea the fish-god, and the goddess of the Bhurs or Maghas, who was so closely related to him, must have come from the same place. She must have been the ancient Sumerian earth-goddess, who afterwards became Davki or Davkina, and who, we are told by Dr. Sayce, was worshipped at the port of Eridu as the Gingiri or creator,² and it was she who was the mother of Hea and his counterpart Indra.

It is in the country of Magadha and throughout Eastern India that the worship of the great mother, the mother earth, is most prevalent at the present day, and it was in the Kalinga country that the custom of human sacrifice, called the Meriah, lasted longest, and it was these sacrifices which were originally offered by the Maghas to their mother goddess Maghā, and it was she who became the second month of the year, the wife of Pūshya or Pūshan, the sacred bull, or the companion of the great mother Tai, who originally ruled the first month. In this capacity she was the moon-goddess, and hence her daughter Venus is also called Sitā, which means the moon.³

But the worship of the great mother was also associated with matriarchal customs and the system of tribal rule. This, which was the most ancient Dravidian plan of government, gave much greater power to the women than they ever

¹ Alberuni's India, Sachau's edition, chap. xix. vol. i. p. 215.

² Sayce, Hibbert Lectures for 1887, p. 245.

³ Alberuni's India, Sachau's edition, chap. xix. vol. i. p. 215.

had under the later patriarchal rule. That similar customs existed in ancient Magadha we have undoubted proof, in the account of the court arrangements of Chandragupta, king of Magadha, which were recorded by Megasthenes, who lived for some time at his court, as ambassador from Antiochus. These statements are preserved by Strabo.¹ He describes the women as being more trusted than the men. They were the king's personal body-guards. They surrounded him when he went out to hunt, and joined in the sport, some from chariots, some from horses, and some from elephants. They also served as soldiers, clad in full armour. In considering the significance of this account, we must remember that the great Chandragupta was not an Aryan king. He and the kings who preceded him for many generations belonged to the Nāga or snake race. The dynasty was founded by Sisunāga, from whom Bimbisāro, the contemporary of the Buddha, was fifth in descent. We know accurately the date of Bimbisāro's reign, which began *a.c.* 537, therefore Sisunāga must have reigned about two hundred years before. This Nāga dynasty, which he founded or rather restored, supplanted the rule of the Ikshvākus or Western Sākas, who had previously governed Ayodhya and the surrounding countries from the capital of Sāketa. When these Western invaders were overthrown, and the old Nāga race came again into power, it would be natural that they should restore their old customs, even if they had been subverted by the Sākyas, and among these was evidently the custom of employing women on precisely the same footing as men.²

I have thus shown that the early mother-worshippers were probably originally called Maghas, that they came from the Euphrates valley, and that they established matriarchal rule throughout India, distinct traces of which remained in the customs of the courts of the kings till a late period. It was they who were the first rulers of the country among the five

¹ Strabo, *xy.* l. 53-56; McCrindle's *Ancient India as described by Megasthenes*, pp. 71-73.

² I must not be understood to assert that Chandragupta was a descendant of Bimbisāro. He belonged to a totally different family, but still one of Nāga race, as his name Chandragupta (protected by the moon) proves.

races known as the Snake races. They must have spread themselves throughout the length and breadth of the land, for as the Bharatas they were the ruling race in the North, and as the Vidarbas or the matriarchal races they were the first founders of stable government in the South. It was they who were the first worshippers of the moon-goddess, who, as the heavenly mother, ruled the months first and afterwards the mother's year of ten lunar months. It was the earth that was the mother of the seasons which, with the recurring months, formed the original measures of time.

Historical Evidence given by Sacrificial Animals.

But before the moon-goddess was thought to be the measurer of time, and the god that gave productive power to the earth, that office was ascribed to the blood of human beings, and the mother earth, fertilized by human blood, was the earliest idea of creation. It was thus that man was held to be the first of sacrificial animals, and the successive series of sacrificial victims given in the Brāhmaṇas completely coincides with the evolution of religious thought, and this again represents the succession of dominant races, as each race was distinguished by a special victim. The following is the list of animals successively considered fit for sacrifice, as given in the Brāhmaṇas.¹ 1. Man. 2. The horse. 3. The ox. 4. The sheep. 5. The goat. But this order is not historical, and the object of change from the true order of history was, like that of other changes in the ritual made by the Indra-worshippers and Sākas, to do honour to their national gods. Thus the horse is placed next to man, as the first animal that became too noble to be sacrificed, because the horse was sacred to the Sākas; and the goat came last, because it was the victim offered by the lower classes, who represented the early linga-worshippers. History, on the other hand, tells us that it was the early mother-worshippers of Bhārata, and Maghas of Indian history, who offered human sacrifices.

¹ Sat. Brāh. i. 2. 3. 6, vol. xii. p. 50; Ait. Brāh. ii. 8, Haug's translation, vol. ii. p. 90.

That the shepherds or early linga-worshippers, the Kauravyas, sacrificed the goat to the moon-goddess, who ruled the woman's year of ten months, and the year of eleven months sacred to the god of the linga. The ox was sacrificed by the sons of Kus or Kasyapa, the Takshakas, the founders of the full lunar year of thirteen months, who regarded the moon-god as the cow and bull of light. Next came the horse, which was the sacred animal of the Indra-worshippers and Śūkas; and last of all the sheep, which was offered by the early Aryans to Varuṇa, and afterwards to the sun-god, and it always remained a solar victim. Thus rams were offered to Apollo,¹ and Balak king of Moab offered to the Moabitish sun-god, at Balaam's request, a bullock and a ram on each of the seven altars he successively built.²

This selection of five sacred victims in the Brāhmaṇa is, like the other instances where the number five is used, based on the five seasons into which the sacrificial year was divided. But the five victims also have a genuine historical meaning, as they denote the animals especially sacred to the five races, who were recorded in the priestly annals³ as the successive rulers of India. The chief object of these annals was to maintain the efficacy of the sacrifices, and to prevent the country from suffering from the evil consequences which must follow maimed offerings made by ignorant priests. Therefore all changes made by each dynasty who succeeded to the supreme rule were carefully recorded, and these annals became a record of the history of the country. Though, as I have shown in the preceding pages of this essay, the changes made by each dynasty or race were very great, yet, as they preserved the worship of and reverence for the older gods of their predecessors, they can, as I have tried to prove, be easily detected by an analysis of the ritual; and from the whole a fairly accurate sketch of the history of the country can be made. In the evidence that I have brought forward

¹ Encyclopædia Britannica, Art. Sacrifices, vol. xxi. p. 135.

² Numbers xiii. *passim*.

³ The Sybilline Books of ancient Rome are a specimen of these annals, which were doubtless preserved, first by careful oral tradition, and afterwards in writing, by the national priesthoods of all people who could boast of a history.

to prove that the sacrificial history deduced from the Brāhmaṇas agrees with that taken from the legends, there are disturbing elements arising from the apparent antagonism of the conclusions based on a series of five races or five fathers, and those drawn from a series of three fathers and mothers. In the analysis of the three seasonal festivals I have shown that this last arrangement of ancient history was made by the Sāka and Aryan invaders, who, as immigrants from the far North, brought with them their ancestral custom of dividing the year into three seasons; and as all successions in time were based upon the year and its seasons, the number of ancestors must always be equal to that of the seasons.

This tripartite division was not altogether strange to the Turanian races, as they all worshipped a triad of gods¹ before they mixed with the Aryans; but even if it had been, reverence for the old ritual made it impossible that it should be superseded by the new; and therefore, when the two races amalgamated, both were retained, and an eclectic ritual made by uniting them, the union being made with the slightest possible change in the older ceremonies consonant with the preservation of adequate respect for both the new and the old gods.

But it is in the Mahābhārata that we see the influx of the new ideas most clearly. We find there first of all the five snake races. (1) The Dhrītarāshtra or Bharatas. (2) The Kauravyas. (3) The Takshakas. (4) The Irāvata. (5) The Vāsuki. But these races are almost destroyed in the opening sections of the poem, only a remnant being saved by Aṣṭika, the eighth Vasu or the sun-god, who protected them from being burnt up by Janamejaya.

The real action of the poem begins with the birth of the Paṇḍavas, who were in one sense the old five races re-born and purified as grandsons of the holy Rishi Vyāsa, and reputed sons of Paṇḍu, the father of the fair people, and in another sense, as Ludwig has already suggested, the five

¹ The fivefold division of the seasons was, as I have shown in the analysis of the gods invoked, based upon a triad.

seasons.¹ But these five fathers of the improved race are descended from the three mothers, Satyvatī, the possessor of truth; Prithā=Prithivī, the mother-earth, sanctified by her descent from Sura the sun-prince; and Madri, the daughter of Śalya, king of the Takshakas, representing the northern non-Aryan immigrants. They are thus, both on the father's and mother's side, descended from a northern stock, who divided the year into three seasons. But these five Paṇḍavas are not only hallowed by their descent from the Rishi Vyāsa, but also by their divine parentage. Thus (1) Yudhishtira, the son of Dharma, whose wives are the ten daughters of Dakṣa, who are the ten months of the mother's year,² represents the purified Bhārata and the spring. (2) Arjuna, the son of Indra, the Vāsuki and the summer. (3) Bhīma, the son of Vayu the wind, the powerful wielder of the mace, the Kauravya, the linga-worshipping races of the earth³ or rainy season, the time of storm and tempests, and Sahadeva and Nakula, the sons of the heavenly twins by Madri, the Takshaka princess, are the Irāvata who, like Sahadeva, conquered the South, and the Takshakas who ruled the North and West, which was conquered by Nakula.⁴ As seasons, they were the autumn and winter, and this confirms the conclusion I had arrived at from other reasons, that the full lunar year which the representatives of the Takshakas thus closed, was first calculated by the northern immigrants, the sons of Kaśyapa or Kuś, who were the ancestors of the Takshakas, and it also shows that the worship of the twin brethren originated, as I have already maintained, with the Kuśikas.

That the whole poem represents the conflict between the

¹ Ludwig, Ueber das Verhältniss der mythischen Elementes in der historische Grundlage des Mahābhārata, p. 14. Acad. etc. Prague Königlich-Bohemisch. ges. der Wissenschaft Abhandlungen, vi. Folge, Band 12 (1884).

² It was from the ten lunar months of gestation that the first conception was formed of the immutable laws of nature. This conception was embodied in Dharma the law, and all Dravidian aspirations were directed towards the discovery of the laws which, when obeyed, were to make human society a representation of the union of heaven and earth.

³ Bhīma conquered the East, Sabha (Digvijaya) Parva, xix. and xxi. pp. 84-87.

⁴ Sabha (Digvijaya) Parva, xxi. and xxii. pp. 87-94.

reformers and the old religions and races is proved by its argument. It begins with the conquests of the four brethren Arjuna, Bhīma, Sahadeva, and Nakula, ending with the rule of Yudhishtira, the Golden age, when justice ruled the earth. The rule of justice is subverted by the consequences of the Gambling match, that is, by wars and fighting, which ushered in the rule of the Kaurāvyas. The thirteen years¹ of the exile of the Paṇḍavas represent the rule of the races whose year was the full lunar year of thirteen months. When the Paṇḍavas emerged from their eclipse, and began to contend with their foes, the forces of the Kauravyas were divided into eleven Akshauhīnis or divisions of troops, representing the eleven sacred months of the original sacrificial year of the snake-worshippers, and those of the Paṇḍavas into seven, representing the number sacred to the Semite-Akkadians, the people who first sanctified the seven days of the week.² The whole result of the conflict is that Arjuna, the son of Indra, who represents the Ikshvāku confederacy, headed by the Sakyas and their god Sakko or Indra, is the sole survivor, and the triumph of the Ikshvākus is secured by the overthrow or death of their competitors. The whole story is told in a poem of eighteen cantos, representing the year of the reformers, divided into six seasons or *ṛitū* of two months each, and twelve solar months, or it may represent the original year of five seasons and the lunar year of thirteen months.

¹ Sabha (Anudgata) Parva, lxxvi. p. 201.

² Udyoga Parva, lvi. The Panchālas were led by Dhrishtadyumna, the son of Drupada, king of the Panchālas, born from the sacrificial flame of the sacrifice anointed with butter offered by Yaja, the impure Brahmin, *Adi (Chaitranaiha) Parva*, clxix. pp. 480-483. He was in other words the sacred fire of the Srinjaya or Panchālas invoked in *fig. iv. 15. 4*, as "the brightest and most fiend-destroying of fires." It is this fire which was, as I have shown, that which kindled the annual animal sacrifices. The whole story, like that of the slaying of Bhishma, the eighth Vāsa of the Kauravyas, by Śikhandin, the bisexual representative of Amba the great mother, shows that the conquest of the Paṇḍavas over the Northern tribes, who in India worshipped the sun Bhishma, and the sun, moon, and heavenly powers alone, was secured by the aid of the mother-worshippers, and the worshippers of the united Śiva and Durga, the Virāj, together with that of the Matsya, and Virāta, the Indra and linga-worshippers, and the Semite-Akkadians or Sāka-Sauvira or Vrishnis, and Andhakas. In other words, it was the amalgamated people who had formed themselves into an indigenous nationality, represented by Arjuna's banner adorned with the sacred ape (*Karna Parva*, lxxix. p. 303, and many other places), who conquered those who remained isolated and conservative and attached to their peculiar creeds and customs.

The thirteen years exile of the Paṇḍavas, and the general argument of the poem which seems to celebrate the triumph of the old religions in a purer form, points to the latter conclusion.

But the lists of sacrificial animals in the Brāhmaṇas do not include all that were offered, and it is especially deficient in the animals offered to the mother earth. The reason of this is obvious. The most ancient sacrifice to the earth was man, and the continuance of this sacrifice was secured by the doctrine that the sacrifice was man, and that the animals offered were offered as his ransom. This being once accepted, no further offering was necessary. But other animals, which were still offered in other countries for ages after they had been discontinued in India and among all the Semitic nations, had once occupied a distinguished place in the Hindu ritual. In an old list of sacrificial animals given in the Anguttara Nikaya,¹ the pig and the cock are named as sacrificial animals. The cock is still sacrificed by the aboriginal tribes to the mother earth, and in Greece it used to be sacrificed to Æsculapius, who was probably derived through the Egyptian Imhotep from Hea the Sumerian god of wisdom. He appears in Indian mythology as Ganesa, who, as the elephant-god, is the especial god of the Irāvata, but one adopted as the deity of the race after the name Irāvata, which, as I have shown, meant the sons of Iḍa or Iṣa (the sacred cow or bull), came to mean an elephant. Thus the cock sacrificed to Æsculapius was originally sacrificed to the mother earth, and the Iḍa, who was the purified mother earth of the race who in India made the elephant-god called Irāvata or Ganesa as their protecting deity, was successively the mother earth, the sheep,² the cow, and the bull. Thus

¹ Anguttara Nikaya Chatukka Nipāta Chakkavagga, 39. 2, Morris's edition, published by the Pali Text Society, part ii, p. 42.

² Caldwell, Comparative Grammar of the Dravidian Languages, p. 464, quotes from Dr. Gundert Iḍa as a Sanskrit word, equivalent to and derived from Tamil Eḍa or Eḍaka, a sheep or goat, which also appears in another form in the Dravidian Aḍu. It thus appears probable that Iḍa became the mother earth of the shepherds or earliest linga-worshippers, the first Kauravya, before she became the cow, and became the purified earth of the worshippers of Indra or Hea, the god of the fertilising waters.

the history of the sacrifice of the cock, and of the deities to which it was offered, discloses a long series of chapters in mythological history.

As for the pig, he occupied a very honourable place among the sacrificial animals of Asia Minor, Greece, and Italy. He was looked on as the purifying animal, and was offered for purposes of lustration by the Phrygians, Lycians, and Greeks.¹ At the annual festival of the Arvalia at Rome, held to secure the fertility of the Latin fields, the grove in which it was held was cleansed from the impurity caused by the iron with which the trees were felled, by the sacrifice of two young pigs.² In India, when the sacrifice was originally offered, the pig was probably sacrificed on account of its fertility, and it was thus adopted as an animal especially sacred to the mother of all beings.³ Among the Akkadians it appears in one of the titles of Adar or Uras, who is called the lord of the pig,⁴ showing that he was originally looked on as the father, and therefore the lord of the fertile mother. It was also in Greece not only a lustral animal, but one offered especially to the mother earth. Swine were sacrificed to Aphrodite in Cyprus, also to the same deity in Argos and Thessaly, and they were especially sacred to Aphrodite in Athens,⁵ and they were also sacrificed to Demeter and Ceres, the original Greek and Roman representatives of the mother earth.⁶ In India the sacrifice probably disappeared entirely

¹ *Encyclopædia Britannica*, ninth edition, art. Phrygia, vol. xvii. p. 853.

² *Ibid.* art. Arval Brothers, vol. ii. pp. 671, 672. This shows that the sacrifice points to a time long before the Iron age.

³ The pig is still, as every one who has served in Behar, the ancient Magadha, knows, the sacred animal of the Dogadhs, who represent the earliest ruling race in the country, as is proved by the fact that the village watchmen were always Dogadhs. There can be no surer test of the former antiquity of any race in India than that shown by their fulfilling the office of village watchmen.

⁴ Sayce, *Hibbert Lectures for 1887*, p. 153, note 5.

⁵ Robertson-Smith, *Religion of Semites*, Lecture viii. p. 272.

⁶ *Encyclopædia Britannica*, art. Ceres, vol. v. p. 345. Pigs were, as Herodotus tells us, sacrificed in Egypt to the moon, and Dionysus, the phallic god, at one full moon in the year, and that then the flesh was eaten, though at other times it was abhorred. The sacrifice was evidently to the two mothers, the earth and the moon, and the earthly father called here Dionysus. The former reverence paid to swine as sacred to the mother of all beings is also shown in the same passage, where Herodotus tells us that all betrothals were arranged in Egypt by swineherds, while the further custom, that daughters were not married from their parents' but from some other person's house, points to the ancient time when, by

from the ritual with the advent of the earlier worshippers of Hea or Indra, as the god of the fertilizing waters, as from that time water was used as the means of procuring ceremonial purity, and the pig had probably before that been displaced from its high position as an animal sacred to the mother earth, by the goat, the victim sacred to the earlier linga-worshippers, and sacrificed by them to the phallic god and the moon-god.

Another animal which was sacrificed in other countries, but not as far as I can discover in India, was the dog. The history of this sacrifice seems to throw most valuable light on ancient chronology and the course of religious evolution. The dog was certainly a sacred animal to the northern Akkadians, as it is represented in their mythology by the four hounds of Bel-Merodach.¹ But it is as the animal sacred to the fire-god Adar that it appears as a sacrificial victim in Asia Minor, Greece, and Italy. Adar or Uras was at Nipur "the god of glowing fire," and was a most popular deity at Nineveh among the Northern Assyrians, but was not a favourite with the Southern or Semitic Babylonians.² This god became in Asia Minor the Tyrian Hercules called Melgarth, and there he was especially associated with dogs. Dogs were also sacred to the Athenian Hercules, as is shown by the name Cynosarges or dog's yard, where his shrine was situated. According to Ælian, sacred dogs accompanied the Sicilian god Adranus, who has been identified with Adar.³ But it is in the worship of Ares in Greece, and Mars in Rome, that we find the dog actually sacrificed. Dogs were sacrificed to Ares in Sparta, and the Latins offered a red dog to Mars at the Arvalia, to prevent the crops taking fire. The symbol of Ares was Sirius the dog-star, and there thus appears every reason to connect him with the Akkadian

tribal custom, all the women of the tribe were dedicated to the tribal gods, and the woman selected to bear children used to go to the temples, where the begetting of children was a sacred ceremony. Herodotus tells us that this custom was still kept up in his time to a certain extent by the visits made by women to temples in almost all countries except Greece and Egypt, Herod. ii. 47. 48. and 64.

¹ Sayce, Hibbert Lectures for 1887, pp. 288, 289.

² *Ibid.* pp. 132-134.

³ R. barthelemy-Smith, Religion of the Semites, Lecture viii. p. 273, note.

Uras, the god of glowing fire.¹ The development of this god into Hercules with the club shows that the god of fire was originally the god of the fire-stick, who in the ancient triad took the place of the phallic father. The fire-god in India appears also as a snake-god, and as the planet Mars, under the names Pushkara, Bharmā and Takshaka, and in conjunction with the moon Pushkara he rules the four months of the summer season.² The close connection of the old fire-god and the moon-god is again repeated in the Brāhmaṇas, where Agni and Soma are always treated among the earliest gods. The connection between the fire-god and the Takshaka, as shown in the list of the dominant gods of the seasons, where Takshaka in one list takes the place given to Pushkara-Bharmā in the second, is a further proof that it was the race of handicraftsmen, called Takshaka in Hindu mythology, and the sons of Tubal Cain in the Bible, who introduced fire worship. A further proof of the epoch during which fire became sacred is given in the Rigveda, where, in a hymn to the Ribhus, the respective deeds of the water-god, the earlier Indra, the fire-god, and the god of the lightning or thunderbolt, who was the later Indra, the warrior god, are discussed. In this hymn Agni, the dog, is said to have been appointed by the goat as the waker of the new year,³ so that the dog succeeded the goat as a sacred animal, and the Takshakas, who revered the dog, must have succeeded the earlier Kaurāvyas, who worshipped the goat, as rulers of India. Throughout the Rigveda and Brāhmaṇas the dog and Agni are both regarded as the messenger of the gods. As Saramāya, the Greek Hermes,⁴ he is both messenger and watch-dog, and both chronologically and mythologically he and Sarama, the dawn, stand, as Max Müller says, "on the threshold that separates the gods of light from the gods of

¹ Encyclopædia Britannica, ninth edition, art. Ares, vol. ii. p. 485. He is the Tistya or dog-star of the Zendavesta, which fights with the demon of drought, *The Yast*, vi. 10-34, Darmesteter's *Zendavesta*, *Sacred Books of the East*, vol. xxiv. pp. 96-102; Sayce, *Hibbert Lectures for 1887*, pp. 161, 164.

² *J.R.A.S.* Part II. April, 1889, p. 320.

³ *Ig.* i. 161. 2. 10, and 12.

⁴ Max Müller, *Lectures on the Science of Language*, second series (1872), pp. 473-475.

darkness." It is Agni who, as the messenger to the gods, takes the sacrifice up to heaven, and it is thus he is called the Brabman, for he held in the older sacrificial ritual the same office as is assigned to Brahma, the god of prayer, in the services to the gods of light. From these notices it is clear that the worship of the fire-god came to India when the religion of his votaries had reached the metaphysical stage, when materialistic sacrifices were beginning to be discredited, and offerings burnt by the sacred fire were substituted for the bloody sacrifices of the earlier materialistic age. The old gods had, according to the teaching of the Brāhmaṇas, gone up to heaven, and were no longer to be fed by the blood of the sacrifice poured out on the earth, but by the smoke and sweet savour ascending to heaven.¹ It was then that the gods became thinkers, and that the new creation, the work of Manu the thinker, began. This was continued under the next regime of the Irāvata, or early Indra-worshippers of the sacred water as the origin of life, till the earth was quite cleansed from the evil influences of the old materialistic religion, and a new earth, peopled by worshippers of the heavenly gods, succeeded that which had been the home of the sons and worshippers of the evil serpent, who was in India the great snake Nahusha, in Irān the three-mouthed Aži Dahāka, and in Greece the serpent Pytho, the god of the Delphic Oracle.

The most salient example of the change wrought by this great revolution in the ancient mythologies is that given by the worship of Aphrodite, who became, from the Pandemic goddess of the Cyprian shrines at Salamis, the goddess of beauty, who rose up out of the purifying waters of the sea. The sea-god, Poseidon himself, is also an ancient deity, who assumed a new form from the water-worshippers. He was

¹ Sat. Brāh. i. 3. 3, 13, 14, vol. xii. p. 38, also note 2, where Agni is said to be the Hotri or sacrificial priest who carries the offering to the gods. He is succeeded in this office by the Vashat call, or the call meaning may he carry it up. This was pronounced by the Hotri at the end of the offering-prayers, which were muttered to the older gods, and loudly chanted to the accepted Vedic deities. This change, from the burnt offering to praise and prayer as the true sacrifice, as is shown later on, was made by the Aryan Brāhmaṇas. The Jewish ritualists regarded the sacred fire in the same light as the Hindus. See Levit. ii. 2, 9, iii. 6.

originally a lunar and phallic god, as black bulls were offered to him. Bull fights took place in his honour in Ionia and Thessaly, and at Ephesus he was called the Bull Poseidon, while his cup-bearers were called bulls.¹ He next became the fire-god, and in this capacity assumed the trident, or symbol of the fire-stick, as his sacred weapon. In these changes, as well as in his final transformation to be the god of the sea, he resembled the Sumerian god Hea; and even if the actual derivation of the Hindu Pūshan and the Greek Poseidon (the god having the form *εἰδωλον*, representing *εἶδων* of Poos or Pūsh), from the same Akkadian root, is untenable, there is undoubtedly a great similarity between them. To both black bulls were sacred, both were gods of battle, and Pūshan, like Poseidon, was the form of the phallic god which was especially sacred to the adorers of the god of the water of life.² In this summary of some of the coincidences between the mythologies of Europe and Western Asia and those of India, I hope I shall be thought to have proved that in all these countries national as opposed to tribal religion began with the worship of the mother earth, and that this was succeeded by that of the phallic gods. The next change was the deposition of the phallic god, and the elevation of the moon-god to the principal place in the triad. This was accompanied by the worship of the fire-stick. Then came first the worship of the god of the water of life, and next that of the god of the divine drink, the Dionysus and Bacchus of the Greeks and Romans, and the Soma of the Hindus. All these changes appear to have been wrought by five successive races, whose ethnology I have attempted to trace; but in doing this difficulties arise from the regular sequence of events in all these countries being disturbed by complications introduced by the Sākas and Aryans.

¹ *Encyclopædia Britannica*, ninth edition, vol. xix. p. 58, art. Poseidon. The connection between Poseidon and the worshippers of the god of the divine water is further shown by Prof. Tiele's identification of the Latin Neptunus, Poseidon's counterpart with the Apām Napāt, the god of the waters, of the Zendavesta. This name, he says, has disappeared among the Greeks. But if my suggestion is right, it has not disappeared, because it was never adopted by them. They worshipped the same god under his other name of Push. Tiele, *Outlines of the History of Ancient Religions*, Trübner's English and Foreign Philosophical Library, vol. vii. p. 230.

² See ante, pp. 349, note 1, 350, 364, note 1.

Historical Evidence given by some of the Myths of the Hermes Series.

But it is in the myths of the Hermes series that we find perhaps the most valuable evidence connecting the gods of Greece both with the Aryan gods of India and with their Non-Aryan predecessors worshipped by the Hindus in India and by the Turanians on the Euphrates.

First Hermes, Hermeias, is, on the authority of Kuhn, Benfey and Max Müller, now admitted to be the same as Saramēya, the dog of the gods in the Rigveda.

Secondly. Hermes is the god of the fire-stick. He is the phallic god of the Cabiri, the counterpart of Hephaistos.¹

Thirdly. He is, like the Indian Agni, the messenger of the gods. He is the leader of the two dogs who guard the under-world, the other being the Greek Kerberos, the Sanskrit Śarvara, the spotted dog.²

Fourthly. He is, the dog who is said in Rg. i. 161. 13, to be appointed by the goat to succeed him, and to waken the year to revived life. To find Hermes under this guise in Greece we must look to the story of Io. Zeus changed Io into a white cow, that is to say, he made her the moon-goddess. This shows that she was first a dark divinity. Zeus sent Hermes to get her from Hera, the original moon-goddess, to whom the goat was sacred. This is just the same as the Vedic story, except that in the Greek myth Zeus gave Hermes charge of the white year cow, the moon and not the goat, who, in the Veda, took the place of Uz, the Akkadian goat god, who directed the course of the year, and in solar times watched the revolutions of the solar disk.³

Fifthly. Both the Hindu and Greek mythologies make the fire-god, who succeeds to and helps the moon-goddess, the active productive agent.⁴

But there is still much more to be learnt from the story

¹ Encyclopædia Britannica, xi. p. 749, s.v. Hermes.

² *Id.* p. 750.

³ Sayce, Hibbert Lectures for 1887, p. 285.

⁴ The Sacred Hermæ of Athens, described by Herod. ii. 51, as phallic images, show that Hermes was originally a phallic fire-god.

of Io. Her father was Inachus, the river of Argos, the father of the Argive race, but this seems to be later than the time of the myth making her the daughter of Iasos, the change being made when the worshippers of Poseidon, the god of the waters, sanctified the rivers, and made them fathers of those who dwelt on their banks. Her name appears as the violet *Ἴον* and the *Ἰόνιον-πέλαγος*, the violet-dark Adriatic across which she swam.¹ Thus before she was the moon-cow she was the goddess of the dark vault of heaven, the *Rāma* of the Hindus,² the T'hom of Genesis, the Abza of the Akkadians, of which Ea, the fish-god, was lord.³ The hundred-eyed Argus, who was set by Hera to watch her, was first lulled to sleep by Hermes, and afterwards killed by him with the Harpe, or crescent-shaped sword, or the new moon with which Merodach killed Tiamut the dragon.⁴

Here Argus the guardian bears a name very like that of Argos, Io's birth-place. Hermes, as the slayer of Argus, is called throughout the Iliad and Odyssey *Ἀργειφόντης*, a name also given to Apollo as the slayer of *Ἀργᾶς*, the Doric for snakes.⁵ Mythic story also tells of another Argus, the dog, whose death is so touchingly described in the Odyssey as happening in his twentieth year, when he saw Odysseus, the wandering sun-god, come back to his home in the West.⁶ It was through the help of Hermes that Odysseus came back, and the watch-dog he had left behind must probably belong to the group of guardian dogs connected with Hermes. In his life of twenty years he completed by reduplication the era sacred to the mother sanctified by her ten lunar months of gestation,⁷ just as the twenty-four books of the poem mean

¹ Liddell and Scott, *Ἴόνιος*.

² *Rāma* means darkness.

³ Sayce, Hibbert Lectures for 1887, p. 102.

⁴ Encyclopædia Britannica, xiii. s.v. *Io*; Sayce, Hibbert Lectures for 1887, p. 102.

⁵ Liddell and Scott, *Ἀργειφόντης*.

⁶ Odyssey, xvii. 326, 327—

Ἄργον δ' αὖ κατὰ μοῖρ' ἔλαβεν μέλαρος θανάτου

Ἀντίκ' ἰδὼν Ὀδυσῆα τεύχεσσι βίαντιν.

See comp. between the wanderings of Odysseus and the northern myth of Ormodel, Ponka, *Origines Ariæne*, chap. iii. pp. 59, 60.

⁷ See pp. 337, 393, with reference to the productive power of sacrificial pairs.

the completion of the solar legend; and the death of Argus, the guardian of Io, also marks a religious revolution, which made the moon the ruler of the sky. But *Ἀργειφόντης*, when applied to Apollo, means the slayer of snakes, called *Ἀργῆς*. Almost all evil beasts killed by mythic heroes are either snakes or their offspring dragons, for these are merely snakes invested by myth makers with non-serpentine attributes; it is therefore most likely that Argus slain by Hermes was, like the dragon killed by Perseus, and Tiamut by Merodach, with the same weapon, a snake-god, like the *Vṛitra* or snake-gods killed by Indra.

Before inquiring whether all these similar words can be derived from the same root, or whether the verbal coincidences they show cover a radical difference of origin, we must turn to the myth of Iason, connected with that of Io by the name of her father Iasos, and the epithet *Ἰασον Ἀργός*, the Argos of Iasos.¹ It was he who, with the Argonauts, made the celebrated mythical voyage in the ship Argo.

This ship Argo, which adds another name to the list of those seemingly connected with Argos, is shown by Aratos to mean the constellation of that name, as in his *Phainomena*, v. 348, he speaks of it as Iason's Argo. This poem is the versified form of the *Phainomena* of Eudoxus, an astronomer of Cilicia, who lived between 403-350 B.C.² The constellation Argo is the largest of the brilliant groups of stars encircling the Southern Cross, the most conspicuous group near the Southern Pole.³ Its principal star is Canopus, the Hindu Agastya, which, as I have shown in pp. 424-426 of this essay, led the snake-worshipping *Dānavas* to India. This star is not visible in Europe, nor "in any locality higher in latitude than the southern part of the Mediterranean," but it was to the Southern nations the leading star

¹ *Encyclopædia Britannica*, xiii. p. 202, s.v. Io.

² The *Phainomena* of Aratos, translated by R. Brown, jun., p. 40, and Introduction, p. 1. Mr. Brown shows that Eudoxus must have derived his facts from the Chaldean astronomers.

³ Guillemin, *The Heavens*, edited by Norman Lockyer and Proctor, pp. 287, 288.

of the firmament, and is spoken of by an Egyptian poet of the time of Thothmes III. about 1600 B.C. as "Karbana" (the Karbanit of the Assyrian astronomers of Assurbanipal) "who pours his light in a glance of fire when he disperses the morning dew."¹ It was only a southern race who could have made Argo and its stars their heavenly guide, or the great snake their chief god. But the Dorians of Argos came from the South. Their father was Danaus, and he in mythic legend is said to have come from Egypt, where Canopus, sacred to the chief star of Argo, was the leading port before the rise of Alexandria.² But these people brought to Crete and Greece Dravidian customs, as shown in the common meals (*συσσίτια*), the Spartan training of both sexes, the five Ephors,³ and above all, the great snake god Pytho, who inspired the oracle at Delphi before he was killed by Apollo. These customs, as well as their reverence for the constellation Argo, must, as I shall show, have been brought from a country far to the south of Canopus at the mouth of the Nile. To explain this we must look to the Zendavesta and Mabūbhārata. In the Zendavesta we find that the rulers of heaven are four stars, which have in them "the seed of the waters, the seed of the earth, the seed of the plants," Tištrya, Satavāēsa, Vanant, and the Haptōiringus.⁴ It is they who maintain law and order, and who war against and destroy the Pairikas, the planets or wandering stars, who by their motions throw the heavenly system into confusion.⁵ The staunchest defenders of order are Tištrya, which is the dog-star Sirius, who protects the moon, and Satāvēsa, who pushes the waters forward.⁶ They rule the East and the South, while Vanant rules the West, and the Haptōiringas (the Great Bear) the North. It is Tištrya who, like Sāramēya,

¹ Eridanos, River and Constellation, by R. Brown, jun., v. p. 14; Brugsch, Egypt under the Pharaohs, i. p. 371.

² Encyclopædia Britannica, vol. v. p. 23.

³ They were the Hindu Panchayat or Council of Five, which held such an important place in the Dravidian system of government, Part II. J.R.A.S. April, 1889, pp. 201, 202.

⁴ Darmesteter's Zendavesta, Sirūzah i. 13, Sacred Books of the East, vol. xxiii. p. 9.

⁵ *Jb. Tir Yašt*, 8. 9. 12. 39, pp. 95-97, 104.

⁶ *Jb. Tir Yašt*, i, pp. 92, 93.

is the dog fire god who brings rain from the East, and Satavaēsa, the ruler of the South, who pushes the waters forward. This phrase is explained in the Bundahis, where the constellation Satavēs is said to control the tides in the sea of Satavēs, the sea of Oman,¹ and to bring back into the Arabian Sea, called Vourukasha, the water purified by its inflow into the Persian Gulf, called Pūitika, or the "clean sea."² Here, as in the Greek myth, we have the dog-star or fire-god who protects the moon, placed in apposition with another star or constellation called in the Zendavesta Satavaēsa.³ But to see what star or stars are called Satavaēsa, we must turn to the Hindu legends of Agastya. In one of the myths of the Mahābhārata of which he is the hero it is said that the gods when oppressed by Nahusha (the great snake) betook themselves to Agastya, and induced him to drink up the waters of the ocean which covered the evil seed of the race of Nahusha (the Kālakeyas), and that to repair the evil done by him, the moon-goddess, in the shape of Gangū, the great river, fills the sea and brings the waters back again.⁴ Here we have the phenomena of the tides ascribed in mythic language to Agastya, the chief star in Argo, just as Satavaēsa, which apparently means

¹ West, Bundahis, li. 7 and xlii. 12, Sacred Books of the East, vol. v. pp. 12 and 41.

² Darmesteter's Zendavesta, Fargard iv. 17-19, Sacred Books of the East, vol. iv. pp. 53-54.

³ Vāśa or Satavaēsa seems to be connected with Vāśaka, the head of the Visah family, who was defeated by Tasa, the son of Naotara (the new star), Aban Yast, 53-59, Sacred Books of the East, vol. xliii. pp. 66-68. Tas again may be the same as the Polar star called in the Babylonian Tablet Turas, and Dānu the divine judge, line 13, star x: Remarks on the Tablet of the Thirty Stars, by R. Brown, jun., Part II. Transactions of the Society of Biblical Archaeology for February, 1890. Satavaēsa again would mean the hundred (sata) Vāśas or Vāsas, the stars of the constellation Argo, as opposed to the new star Tistya, and the moon, who, like the Polar star, represented the Northern races as warring against the people and star gods of the South.

⁴ Mahābhārata, Vana (Tirtha Yatra) Parva, ciii.-cix. pp. 324-340. That Gaṅga, the great river, was originally the full moon, is proved by Rg. ii. 32. 7, where Gaṅga, Sinivati, and Rāka are called on to help women in labour. Sayana says Gaṅga is the full moon, and the same as Anumati. This latter word is said in the Ait. Brāh. 7. 11, Haug's translation, vol. ii. pp. 457, 458, to mean the full moon. Sinivati the new moon, and Rāka the last half of the new moon day. The feminine form Gaṅgā is used to represent the moon as the goddess, but Gaṅgu must, in Rg. x. 48. 8, mean the river and not the moon, as Indra is there said to have led the Atithigiva (a name for the Aryan Tritu) to the Gaṅgu, see Zimmer, Altindisches Leben, chap. xiii. p. 352.

the whole constellation Argo, controls the tides in the Zendavesta. In the Hindu legend Agastya, the ruling star of Argo, is succeeded in this work by the moon-goddess Gaṅgā, who supplies water to the sea, just as Tistya, the rain-star, who protects the moon, gives her the waters which enable her to fulfil her mission. Both the stories point to a time when the control of the tides was held to belong to the constellation Argo, the ship of the heavenly mother, but when the coincidence between the high tides and the new and full moon was observed, this office was transferred to the moon, who was also held to be the measurer of time. But this could only have been done in the Oceanic seas facing the Persian Gulf. Neither in the Red Sea nor in the Mediterranean could the tides have attracted much notice, and it must have been the people who, as they sailed out of the Persian Gulf, saw Canopus lighting up the Southern heavens, who attributed to its power the ebb and flow of the tides. They found the tides to be hardly perceptible in the Red Sea and the Mediterranean, the only other seas with which they were acquainted, and thus it would seem that the power of Argo, which was low in the heavens and partly invisible, was less than when the constellation was in the Arabian Sea high above the horizon, near the Southern pole. It was in the North that they reached the home of the god of the fire-stick, and the decrease of the power of Argo in this region was ascribed to him who was said to have lulled Argo to sleep, and to have stopped him from troubling the waters, while Argo or Argus was finally dethroned and slain when the moon was installed as the measurer of time and the controller of the tides.

But the Hindu Agastya was not always a star. In a passage in the Vāyasaneya Samhitā, used in the ceremony of shaving the heads of all male children, we find that the threefold age of the three fathers of the race, Jamadagni, Kaśyapa, and Agastya, is called on to give long life to the boy, whose hair is moistened by the sanctifying water.¹ Of

¹ Saṅkh. Gṛhya Sūtra, i. 28. 9, and Pāras. Gṛhya Sūtra, ii. 1. 9-15, Oldenberg's translation, Sacred Books of the East, vol. xxix. pp. 55 and 302; Vaj. Saṅh. iii. 6. 2.

these three fathers Jamadagni is, as his name shows, the twin (jama) Agni, the Swastika, or pair of fire-sticks. Kasyapa is the father of the Kāsi, the husband of Daksha's thirteen daughters, who are the thirteen lunar months, the originator of the lunar year, and Agastya must therefore be the god who is older than these two Northern gods, the great snake or phallic god of the South, called Nabusba when on earth. He was cast down from heaven by Indra, who was the new star (Naotara) of the Zendavesta, Tistrya, the blazing dog-star, just as Argus the watcher was lulled to sleep by Hermes the fire-god. When the moon-goddess became the ruler of heaven, her union with the god called by the men of a later age Zeus or Dyaus, the god of the bright sky, was completed, and this union was commemorated by the great festival of the *Ἱερός γάμος*, the sacred marriage, held annually at Argos in February-March, the month *Ἡραῖος*, called at Athens *Γαμηλίων*. But the actual event symbolized by this marriage seems to have been the addition of two months to the former sacred period of eleven months, making the full lunar year of thirteen months; but this dropped out of memory when the solar year took the place of the lunar year.¹

Before the invention of alphabets and the diffusion of written literature, popular myths were found to be the most impressive and lasting teachers of history. If my conclusions are right, the myths I have analyzed give in outline a complete account of the Northern progress of the seafaring races of the Euphrates valley, who made their way by the Red Sea and Egypt to the coasts and islands of the Eastern Mediterranean. The same myths also throw light on the connection between the Euphratean races and the people who lived and traded on the Western coasts of India. They tell us of a race of trading seamen, whose chief gods were the mother earth, and the snake their father, whom they had

¹ See *Encyclopædia Britannica*, s.v. Hera, xi. p. 680, also Io, vol. xiii. p. 302. The husband of the moon-goddess was probably originally *Ἰάρος*, the son of Io, the dark night. It was the dark night of heaven which was first worshipped, and Varuna was the dark night, Muir, *Sanskrit Texts*, vol. v. sect. v. p. 58.

exalted to be the mother and father of the starry heavens. The dark abyss of night was the heavenly mother, and the stars which guided them on their voyages were her sons. The father king and leader of this heavenly host was the brightest star of the constellation near the Southern Pole, which was to them the ship, that is the ark or womb of the mother of the stars. The might of the king was shown in his control of the tides, and he led his worshippers over the pathless wastes of the sea. Guided by him, and the coasts, they came by the Red Sea into Egypt, and thence to the Mediterranean, where they met the race of handicraftsmen whose gods were the pair of fire-sticks, from which the fire which worked the *meule* of their craft was born. These people kept dogs to guard their property, and looked on the "sentinel stars" as the heavenly watch-dogs. But these sons of Ku¹ also went by land to the Euphratean countries, and on their way southward, through the desert tracts of Central and Western Asia, they learnt that the god of the fertilizing rains was an agent no less active and necessary for the production and maintenance of life, than the divine heat of the fire. When they came to the shores of the Southern ocean, and had risen to influence in the country, they were able to point out that, great as was the power of Canopus in controlling the ocean tides, it did not extend to inland waters like the Caspian Sea, and the Southern sailors had already learnt how feeble the tide-force was in the Red and Mediterranean Seas. The Northerners argued that the real rulers of the stars must be the star in the East, which brings the rain,² and this star they took to be Tištrya, a name seemingly connected with the Akkadian Tsir,³ a snake, and it was he, the brightest star in the heavens, whom the Akkadians looked on as the heavenly snake ruling in the East, the home of the snake-worshippers. This star, which, unlike Canopus, was visible in the North, became to the Northern

¹ The rainy countries of India lay in the East.

² See Mr. Brown's interpretation of line 29, star xiv. in the Babylonian Star Tablets, part ii. Proceedings of the Society of Biblical Archaeology for February, 1890. He here translates Tsir as snake.

raises the watch-dog of heaven, and the bearer of the heavenly fire. He, as Hermes, lulled the leader of Argo to sleep, by counteracting in the North the power by which he ruled the Southern waters. He, as the heavenly guide of the fire-worshippers, protected the moon, when the race of handicraftsmen found out that she was the measurer not only of monthly but also of annual time, and made her the ruler of the heavens. Her power was universal, and not like that of the rain-bringing Tistya and the tide-controlling Canopus, restricted to especial quarters of the heavens, while in the Southern Ocean, the peculiar domain of Canopus, her power at the new and full moons was greater than his. It was through the agency of the dog-star, as Hermes, that the moon-goddess was made ruler and consort of the dark vault of heaven. The two united rulers were probably at first feminine, being symbolized as Io and Hēra, Io then became Iasos, her son, and he was afterwards changed to Zeus and Dyaus, the ruler of the bright sky, by the sun-worshippers. I cannot now follow the myths further through all their ramifications, but every one of the conclusions seems to follow naturally from the varying forms of the story which I have traced back to the Euphrates valley. They are all supported by proofs, and the truth of the whole series of historical events taught, if my conclusions are correct, by these myths, is corroborated by the evidence from other sources, which proves that early civilization in Asia and Europe was founded by a race of Southern Dravidians living near the shores of the Persian Gulf. These people made their way northward by sea, and both in the North and in their original home, they were aided in their task of improving human institutions by Northern immigrants of a different race.

But if this is the case, the names of the mythical beings, and of the places recorded in these stories, ought to be derived from Dravidian roots, whereas they almost all come from an Aryan root "ark," meaning to be bright. Therefore either (1) these names are not the original names given by Dravidians to the beings and places to whom they are assigned, or (2) "ark," if adopted as an Aryan root, must be

traceable to Dravidian sources. That the first supposition will not meet the facts of the case, seems to be clear from the persistence of the names. The Aryan-speaking Greeks would hardly have given a new name to the ship *Argo* while retaining the old legend, but at the same time the root "ark," to be bright, is widely disseminated through Aryan languages. It is impossible in the present state of our knowledge of the mutual interchanges which must have accompanied the union of the Aryan and Dravidian races to trace words from one to another authoritatively, and to enable us to do this we must await the rise of another Grimm, who will do for Dravidian and Aryan tongues the work Grimm did for Aryan languages. That the words I now allude to ought to be Dravidian, seems to be proved by very strong historical evidence, but as to the linguistic proof I can only offer the following conjecture. In the first place I would point out that one at least of these names derived from "ark," that of *Argos* the city, has an alternative form *Argolis*, meaning the country of *Argos*. In Akkadian languages "gal" is one of the nominal suffixes, added to roots to make substantives,¹ and *Ur-gal* would therefore be a regularly formed Akkadian noun. This might possibly be connected with the Akkadian *Uru-gal*, the great watcher, which would be a most appropriate name for the leader of the heavenly ship.² There also appears in one of the Magical Texts, translated by Dr. Sayce, a word *Ud-gal*, which he translates as "great worms," and he also in a note says that "udda" probably means a kind of serpent.³ There is also in Tamil a root "ūru,"⁴ to creep, and in Canarese another similar root "ur-i," to burn, which is apparently reproduced in the Lat "uro," to burn, the Armenian "ōr," the Hebrew "ūr," and the Afghan "or" or "wur," meaning fire, all of which seem to show a connection between the creeping snake

¹ Haupt, *Akkadische keilschrifttexte*, p. 137. For this reference I am indebted to Mr. Evans of the British Museum.

² Sayce, *Hibbert Lectures for 1887*, p. 80, where the term is used for the high priest of Bel.

³ *Id.* p. 451, note 2.

⁴ Caldwell, *Comparative Grammar of the Dravidian Languages*, p. 467.

and the blazing fire. When we further remember that the Southern Dravidians made the snake the great father on earth, and translated him to the sky as a star and the father of the stars, who were also heavenly snake-gods, it becomes exceedingly probable that all these names originally came from a root "ur," perhaps meaning a snake, and that "ark" comes from these roots by adding to it *g*, the radical consonant of the nominal suffix. "Ur" in Akkadian means the foundation, the city, the girdle or horizon, and also the dog, and all these various meanings would naturally be assigned to it by the intermixed Southern Dravidians and Northern Aryans, whose history is described in these myths.

Evidence as to the Changes wrought by Aryan Influence.

The ancient ritualists, like the Comtists of the present day, traced religious evolution to three distinct stages of thought. In the first, or theological stage, the gods were the mothers and fathers of their worshippers. In the second, or metaphysical stage, thought intervened and interpreted and spiritualized the godhead. While the third, or positive stage, was represented as the product of speech. In India it was the sons of Saravati (the possessor of speech), the Sākas and Aryans, who were the leaders in this second or rather third revolution. It was they who brought from heaven, not only the immortal Soma, the drink which made men equal with the gods, but also the divine gift of song. It was the divine bird, Suparni or Gaḍura who brought these immortal and life-giving gifts to earth. In Greece it was Dionysus himself who was born from Demeter the mother earth, and it was Orpheus,¹ the god of the lyre, who recalled the dead Eurydice from the grave; while it was his successor Apollo, also the god of music

¹ The myth of Orpheus, who, after he rescued his wife, was slain by the Bacchantes, who were jealous of his unconquerable love for his wife, also illustrates the change wrought by the Aryans in the introduction of family life. The Bacchantes represent the Thracian women, who loosened the close of the old period of tribal life, when permanent marriage was unknown. The close connection between Orpheus and the Dionysiac orgies is exactly similar to that between the Soma worship and the sanctity of song in India. They were both of the work of the same race. See *Encyclopædia Britannica*, ninth edition, Orpheus, vol. xviii p. 51.

and of song, who killed the great snake Pytho. The feeling of hesitating dread with which the startling changes made by Aryan innovators were regarded by the practical Dravidian theologians is well shown in the account of the dispute between Mind and Speech given in the Brāhmaṇas.¹ They both contended before Prajāpati, the chief of the older gods, which was the best. Prajāpati decided in favour of Mind, as he said Mind did the work which Speech followed and imitated, and in consequence of his denying all power of invention to Speech, she refused to officiate at his sacrifices, which were accordingly performed in a low voice, without loudly chanted hymns to bear the offerings of the worshippers to the gods. Henceforth they worked together, Mind conveying to the gods the sacrifices offered without hymns, while Speech conveyed those accompanied by sacred hymns.

But this great change could only have been accomplished after an enormous lapse of time, for before it could ever have been begun, the Hindu people must have learned to speak Sanskrit dialects. All those now spoken show unmistakeable traces of having been formed from the Sanskrit spoken by a Dravidian race, and even the Vedic Sanskrit could only have been used as a language by a people who originally spoke Dravidian tongues. Almost all scholars now admit that the Sanskrit linguals *ṭ*, *ḍ*, *ḍh* and *ṇ* are of Dravidian origin.² Therefore the authors of the Rīgveda, who habitually use these letters, must have been the descendants of many generations of Sanskrit-speaking people, whose primitive speech had been altered to meet the linguistic requirements of the Dravidian race who formed the great majority of the ruling races of the country. These people must not only have learnt Sanskrit from their Sanskrit-speaking mothers or fathers, but also from Sanskrit schoolmasters. It must have been the sons of Sarasvatī who first added literary teaching to the physical, political, and industrial training which was so carefully looked after in all Dravidian states. The changes

¹ Sat. Brāh. i. 4. 8-12, vol. xii. pp. 130, 131.

² Pankaj, *Origines Ariæ*, chap. v. p. 144, Caldwell, *Comparative Grammar of Dravidian Languages*; *Excursus on the Origin of the Cerebral Sounds*, pp. 32-47.

in the language which produced the Vedic dialect must have begun ages before the earliest hymns of the Rigveda were composed; but even when the dialect was formed, a long interval must have passed before the earliest hymns could have been put into verse. Before this was done the metres had to be arranged, and as all these are shown in the Brāhmaṇas to have a ritualistic meaning, these metres must have been accepted as especially sacred by a professional priesthood, who had before laid down rules as to the sanctity of numbers.

Evidence as to the Antiquity and Historical Significance of the Sacred Sanskrit Metres.

The metres declared to be sacred in the Brāhmaṇas are : (1) The Virāj metre, consisting of three lines of ten syllables each. (2) The Trishtubh, of four lines of eleven syllables. (3) The Gāyatrī, of three and four lines of eight syllables. (4) The Jagatī, of four lines of twelve syllables. I have elsewhere shown the connection between the Virāj metre, the worship of the mother earth, and phallic worship; but this metre, though it is mentioned in the Brāhmaṇas, was, as representing a form of faith which was by its antiquity buried in mysticism, regarded, like the offerings to the great mother, as lying outside consecrated ground. The mother earth belonged to the old triad, but was not considered to be one of the three succeeding triads which Vishnu conquered. These were the triad of the gods of the earth or the phallic gods, which were conquered by the Gāyatrī, the gods of the air, or those of the Indra-worshippers by the Trishtubh, and the gods of the sky or the heavenly triad by the Jagatī. It is these metres which are said in the Brāhmaṇas to represent the three strides of Vishnu.¹

The Trishtubh metre of four times eleven syllables is evidently framed in honour of the eleven gods or months of the ancient sacrificial year, to whom the eleven victims were offered at the animal sacrifices.

¹ Śat. Brāh. I. 9. 3, 10, vol. xii. p. 269.

The Gāyatrī metre is that which is especially sacred to Agni. The eight syllables represent the four Agnis reduplicated to make a productive pair, while the three-lined stanzas are sacred to the three older Agnis, the four-lined to the four Agnis.¹

The Jagatī metre of four times twelve syllables is that sacred to Vishnu, the Semite Akkadian god of the solar-lunar year, and the four lines represent the four Agnis.

The age of the formation of these metres is limited by that of the last of them. They must all have been elaborated after the Semite Akkadian Vishnu-worshippers came into India, and that there was a very early connection between these immigrants and the Aryans of Irān is shown in the legend in the Bhavishya Purāṇa, which tells how Śamba, the son of Kṛishṇa or Vishnu, brought the priests of the Magi into India from Sākadvīpa.² The truth of this legend is farther corroborated by an examination of the Gāthic metres in the Zendavesta. Of the five Gāthas two, the Gātha Ustavaiti and the Spentā Mainyu, are in the Trishtubh metre, but the stanzas in the Ustavaiti are not, like the Sanskrit Trishtubh stanzas, made up of four lines each, but of five.³ The metre of the Ahunavairya, the first and oldest Gātha, consists of stanzas of three lines of sixteen syllables each, which resembles the Gāyatrī metre.⁴ While the metre of the fifth Gātha, the Vohūkshathrem, which is written in lines of fourteen syllables each, with a cæsura between them, is unlike any of the sacred Sanskrit metres.⁵ The metre of

¹ See Rg. i. 152, 2, where the strong "four-cornered weapon," the four Agnis forming the sacred oblong figure of the altar, is said to have conquered the "three-cornered," the triangle of the worshippers of the triad, which was placed as the protector of the central fire on the altar in the three "paridhis," or enclosing sticks representing the three former Agnis in the seasonal sacrifices. See ante p. 338. In the present quotation the "four-cornered" weapon is said to have destroyed the haters of the gods, that is, the worshippers of the old triad.

² Part II. J.R.A.S. April, 1889, pp. 226, 252; India and the West in Old Days, by Prof. A. Weber, pp. 19 and 20. The name Sākadvīpa for Ancient Iran proves the great influence of the Scythians in Northern Persia in ancient times, and their subsequent power in India.

³ The Zendavesta, part iii. translated by L. H. Mills, Sacred Books of the East, vol. xxi. pp. 91, 146.

⁴ *Id.* vol. xxi. p. 2.

⁵ *Id.* vol. xxi. p. 176.

the sixth Gātha, Vahistā Īstis, is the most irregular of all. Its stanzas are four lines, the first two of eleven or twelve syllables, the third and fourth of fourteen syllables, with a half line of five added to each.¹ While these metres partly agree with those of the Sanskrit hymn-writers, they show more completely than the latter do the amalgamation between the Turanian races, to whom five was the sacred number, and the Northern people, who were the Vāsukis of India, who believed in seven Vasus, to whom the seven days of the week were hallowed. This is, as shown in the Appendix, a fundamental principle of the Zoroastrian sacred Chronometry. It must have been the priests who were accustomed to the use of hymns composed in these metres in Īrān who brought them to India; and that this actually was the case is proved by Dr. Haug, who has shown that the Udgātris or Chanters were, with the Brahmā, Brahmanā Chamūsi, and Subrahmanya, later additions to the number of sacrificial priests. In the Aṣvamēdha hymn of the Rīgveda (i. 162), which is accompanied by a Soma sacrifice, the sacrificial priests are named, and there are, according to Dr. Haug, no Udgātris or any of the other three classes of priests named above among them, nor were priests of this class known to the Zoroastrian ritual.² But the reciters of praise (ṣānstā sūviprah) mentioned in v. 5 with the other priests must have been their forerunners; and that these again were preceded by ritualistic sacrifices without hymns is shown by all the sacrifices to Prajāpati and the older gods being performed in a low voice. The evidence seems to show that it was the Iranian priests accompanying the Sākas and Aryans who first brought the sacred metrical systems into India; but these were after their arrival reduced to that which governs the collections of the Rīgveda. But the whole arrangement shows that it was under the influence of Dravidian ideas of law and order that the several metres were adapted to the worship of the several classes of gods who had been admitted

¹ The Zendavesta, part iii. translated by L. H. Mills, Sacred Books of the East, vol. xxi. p. 187.

² Aitareya Brahmana, Haug's edition, vol. i. Introduction, pp. 18 and 19.

to the honours of the sacrificial ritual by successive invading and ruling races. But it was to the Aryans that the spiritual idea underlying this new arrangement was due, and it was they who substituted the sacrifice of praise, thanksgiving, and prayer for that of food given as fruits of the earth, or of the sacred animals. These bloodless sacrifices again were a substitute made by the later Indra-worshippers for the animal sacrifices, which were taken to the gods by the sacred fire. These burnt offerings had, as I have shown, superseded those in which the blood of the victims was poured upon the earth. We thus have historical evidence for five distinct series of sacrificial forms, each denoting an advance made by conquering and innovating tribes. 1. The human sacrifice to the mother earth, which was that of the mother-worshipping races, the Bhārata. 2. The sacrifice of animals as a ransom for the sacrificer, in which the blood fertilized both the *linga* and the earth. This was the sacrifice of the shepherds or Virāta or Kaurāvyā. 3. The burnt offering made with the sacred fire, the sacrifice of the Kuṣikas or Takshakas. 4. The sacrifice of the fruits of the earth, and of the animal products of butter, curds, whey, and milk, the sacrifice of the Irāvata or early Indra-worshippers. 5. The sacrifice of praise, thanksgiving, and prayer, which was that which the Vāsuki were led to adopt by the teaching of Aryan and Semitic immigrants.

The whole process, among a people so conservative and tenacious of old customs as the Dravidians were, must have been very slow, and must have occupied thousands of years before the Semite Akkadians brought in the solar-lunar year about 4700 B.C. After they had consolidated their power, and after the Aryan-speaking invaders had made their language the official language of the country, and had elaborated a dialect suited to Dravidian organs of speech, the metres they had brought from Irān, as well as those subsequently framed, had to be arranged in logical order; and when the hymns began to be written, the work of selecting those which were to be considered sacred had to be begun. This work was not carried on from one common centre, but

by a number of different associations of bardic priests, who were distributed over the different districts of Northern India. When each priestly family had prepared its own special collection of sacred hymns, these had to be again sifted and arranged by the compilers of the Rigveda as it has come down to us. They, especially in the first, ninth, and tenth Mandalas, had to unite together large numbers of poems not reckoned among those accepted by the more important schools. The time occupied in these arrangements must, even in an age when writing was known, have been enormous; and if writing was unknown, it must have been still greater.¹ If the Rigveda in its present form was completed and issued as the official collection of sacrificial hymns about 1400 B.C., it seems to me to be probable that the Brahmins who fixed the date of the Veda, that is, of the commencement of the formation of the collection of the hymns of the Rigveda, at the beginning of the Kaliyuga, or 3102 B.C., were more likely to have erred in making the date too modern than too ancient.

In considering this question, it must be remembered that, as Dr. Haug points out, there were in the Nivids, and other non-Vedic liturgical formulæ, hymns apparently older than any of the Vedas.²

During this period, besides the date of 1426 B.C., which I have already noted as shown by Mr. Bentley to be the year when Krittaka was made the first of the Nakshatras, the only certain date we have is that in which the five years' cycle was finally adjusted for sacrificial purposes. This

¹ I would here ask whether it is not possible that the Semite Akkadians, who wrote their language both in Assyria and Babylonia, should have brought some form of writing with them to India, for surely the early inhabitants of Telloh, who took their ships to the Sinaitic peninsula for the transport of the stone used in their inscribed statues, must in their voyages to India have brought the art of writing to that country. The Semite Akkadians, whose Phœnician alphabet is the original of the Sanskrit alphabet, knew the Cuneiform character in Babylonia, and those who came to India must have used it, and their predecessors must also have used the earlier and more hieroglyphic form we find at Telloh. If the Hittites, Egyptians, and Akkadians possessed an alphabet, surely the Hindus, who were no less civilized, must have done the same; and I cannot but believe that careful research will disclose some remnants of old writing in India. Without the art of writing, the miracle of the composition and preservation of ancient Sanskrit literature is almost too great for belief.

² *Aitareya Brāhmana*, Haug's edition, Introduction, vol. i. p. 35.

adjustment is recorded in the Jyotishan or Vedic Calendar. The cycle then began with the month of Maghā in the Nakshatra Sravishṭha, another name for Dhanishṭha. The date of this arrangement was determined by Archdeacon Pratt as 1181 B.C., and by the Rev. R. Main at 1186 B.C.¹ But these dates must mark nearly if not quite the close of the Vedic and ritualistic periods.

Probable Length of Time occupied by the Changes occurring before the Beginning of the Vedic Period.

But if the formation and dissemination of the Hindu Aryan languages, and the consolidation of Aryan ritual, must have occupied such long periods of time, what must be said as to the length of time required for the birth and growth of the civilization on which even the crudest form of the doctrines of mother-worship is based, the extension of these doctrines and those of early phallic and moon-worship throughout Egypt, Western Asia, Europe, and India, the introduction and diffusion of fire-worship and water-worship, and of the Dionysiac cult? Taking India alone, the Dravidian land organization, which must date from the time when the rule of the mother-worshippers was established, presupposes a Kolarian division of the country into villages and provinces, for these divisions are found in parts of the country where there are not now any traces of Dravidian or Aryan rule, and where both Dravidians and Aryans have always been hated. A full study of the question will leave no doubt that the dominant system of land tenure all over India is Dravidian, and that it is certainly based on a previous Kolarian occupation, while in Aryan districts it has been again altered to suit Aryan customs.² I have shown in Part II. the power

¹ Max Müller's Preface to vol. iv. of *Rigveda*, p. 85.

² I have fully discussed the whole question in an essay read before the Society of Arts, and published in their *Journal* for May, 1887. I may also say that it was entirely from a thorough study of the land question as Settlement Officer in Chota Nagpore, and in Chuttigarh in the Central Provinces, two districts which had been almost totally free from Aryan influences till we conquered India, that I first came to believe in the active part played by the Dravidian races in the development of India.

exercised by the Kolarian Malli, Turvaṣu, and Yāvana, in times much later than those when the mother-worshippers were supreme rulers, and this power must be based on an ancestral occupation of the country previous to the arrival of any immigrants from the West. Therefore the first mother-worshippers who came from the Euphrates valley must have found that they had to deal, not with a land of virgin forest and unoccupied plains, but with a large continent which was covered over with communities belonging to another race, though these were probably widely scattered and scantily peopled. There was plenty of room for both, and amalgamation was easy, as both the new comers and old settlers were not separated by racial intolerance, and there was practical good sense on one side, and the friendly welcome to peaceable strangers always given by Kolarian tribes, on the other. But, in spite of these advantages, it must have been very long before the new comers spread themselves over the continent, became the dominant rulers, and established the prestige which made the divine mother they worshipped the symbol, throughout all succeeding religious and racial revolutions, of the greatest and best of the gods. These people were again followed by the linga-worshippers or Virāta, known throughout India as the Nāga or snake race, the sons of the great serpent Nahusha. These new comers displaced the mother-worshippers in the Western half of India, and exercised wide-spread influence in all parts of the country where good culture and irrigation were valuable.

They were again subdued by the Kuṣikas or Takshakas, and they successively by the Irāvata and Vāsukis. The great power of the Irāvata is conclusively shown by the wide diffusion of their name as that of the ancestral river of different countries, which were perhaps ruled at the same time by kings of this race. This is reproduced in that of the river Irāvati, Rāvi, or Purushni in the Punjab, in that of the Irāvati or Rapti in Ayodhya, and in the Irawaddy, another form of the name Irāvati, in Burma, and proves that the Irāvata or Haihayas ruled in all these countries, that is, over the whole of Northern India and Burma, and

this extensive dominion could only be acquired after a long struggle with the previous ruling races. The same may also be said of the Vāsuki Sākas and their Aryan allies.

But the long ages required for the wide diffusion and consolidation of the rule of the dynasties and races of earth, moon, and snake-worshippers and their successors, who all looked on the moon as their chief deity, must also have been preceded by a very long period during which the civilization, on which even the rudest of these religions was based, was being evolved. The earliest Dravidian emigrants, who left their homes in the Euphrates for the Western countries on the one side, and India on the other, took with them the belief that the mother earth was the author of all life, and they also appear to have at least believed that the moon was the measurer of time, and the moon-goddess the law-giver who appointed the recurring months and seasons. But whether this last belief was one formed before or after the emigration, there can be no doubt that in all countries the worshippers of the mother earth believed in the vitalizing power of the blood of the sacrifice. But this materialistic belief implies that those who held it had advanced to a stage of civilization much higher than that which is indicated by fetishism or totemism. These religions can both be held by a wandering tribe, but a religion based on the idea of the fertilization of the soil would never have been developed among a migratory agricultural population. It was to fertilize the soil that human sacrifices were offered. A wandering people would acquire the advantages thus sought for by changing their quarters; they would, like the forest tribes of India of the present day, look out for fresh lands every two or three years, when those they had cleared were exhausted. This constant change was not possible among a stationary people, who had so spread themselves over the country as to make it difficult to find fresh fallow land; and though some fallows are always kept in all early systems of husbandry, yet wherever there are settled communities, there is everywhere some land close to the village which is always under crop, and which must therefore be perpetually

manured. It was from the necessity of manuring land that was to be kept fertile, that the idea of the fertility caused by the blood of the sacrifice was derived, at least I see no possibility of explaining it otherwise; but before it became an accepted tenet of religious belief, it must have been thoroughly impressed on the minds of the people by a long-continued occupation of land in a somewhat thickly populated country, before the sacrifice to the mother earth was thought to be more important than those offered to local deities to avert misfortunes and accidents. It was only a very numerous tribe, or confederation of tribes, long united by national ties, which could ever have thought of worshipping a common mother; for before this they must have got rid of the early feeling of suspicion which made every stranger an enemy.

The national progress implied by this religious development must necessarily have been very slow. As we see from what now goes on in nearly all newly settled countries where the people live in villages, the first villages are fixed at wide distances from one another; these, as they increase in size, form hamlets of emigrants from the parent village, who settle near it, and these again become the centres whence new villages are formed: but this process takes a very long time. It is only trade which rapidly increases population and stimulates energy, and in early times trade could only be carried on along the banks of great rivers and by easy coasting voyages. Therefore the arks or ships, which were the sacred shrines of all ancient people, must have been one of the earliest products of civilized energy; and it was when the people living on the Euphrates and Tigris first found out how to make boats, and to navigate rivers, that their national prosperity began. Till this stage of progress had been reached, the advantages and possibility of emigration could not have been conceived, and emigration on a large scale was impossible till maritime trade had been long established. Ages must have passed before the people of the Euphrates valley were able to send out emigrant fleets to India and Egypt. Yet all the evidence points, as I have

shown, to a very early occupation of the Sinaitic peninsula and of Egypt, and also to that of the Indian continent. In their progress through that country they must have had to depend for assistance on oxen, both as carriage and plough animals, and it must have been these people who tamed the wild cattle and buffaloes in India, which were never used by the Kolarian tribes.¹

There is no reason whatever to say that the emigrations by sea, which I contend must have been made in the very earliest times, were impossible. What is impossible is that the concurrent evolution of civilization on precisely identical lines in countries so remote as India, Egypt, Asia Minor, Greece and Italy, could have taken place, unless the different races had taken their first plans from a common centre, and this centre must have been the Euphrates valley. Emigration by land on a large scale was much more impossible than emigration by sea, for how would it have been possible to provide for the commissariat of the emigration of bands of settlers large enough to resist opposition? Such people must either have exterminated their opponents or been exterminated by them, for they would be sure to be opposed if they came in numbers sufficient to eat up the land. On the other hand, if the emigrating people could make ships, comparatively small numbers might make their way to a new country, and settle there in numbers sufficient for defence, but not so large as to excite hostility. These small settlements could be joined by other immigrants, to whom the first comers could convey news of their prosperity. They had only to do what the Norsemen Vikings did in times recorded in history, and if they could make ships and had the courage and energy necessary to enable them to make sea voyages, they could emigrate, and ships are, as I have shown, always named as among the earliest products

¹ I have already, Part I. J.R.A.S. April, 1888, p. 332, shown that the Kolarians never use milk. The wild cattle must have been the *Bos Gaurus*, the Gaur or so-called Bison, which are really wild cattle. They were tamed by the early Dravidian settlers, just as the *Bos primigenius* or Urus was tamed in Europe. It was from the Gaur or primitive cattle that the mother earth probably took her name of Gauri, which meant the cow-goddess.

of human skill, and they were made long before iron or metals were used.

But however far back we may, by the help of imaginative speculation based on waifs and strays of Ancient History, trace back the beginnings of the vast series of events I have so imperfectly sketched, we must remember that geology proves almost conclusively very early emigrations to Europe of wandering tribes from Asia. These emigrations must have begun towards the close of the Glacial period, for the men of the early Stone age who lived during this time were, as Sir John Lubbock informs us, "Brachycephalic to a very marked degree," with "heavy overhanging brows."¹ These people were almost certainly of Turanian, and therefore of Asiatic origin. They were the people whom De Quatrefages calls the men of Furfooz, whose remains are found in Belgian and French caves with the bones of horses, oxen, reindeer, wild boar, chamois, aurochs and the *Seüga* antelope.² These remains show not only that they were a pastoral and hunting people, but that the climate must have been sufficiently cold to allow of the reindeer, which can only flourish in a land of almost perpetual snow, to live there in large herds. These people must have been the ancestors of the present Basques, who speak a Turanian language, and of the other mixed Dolichocephalic and Brachycephalic people of Europe who are named in De Quatrefages' book as extending through the Sub-brachycephalic to the Sub-dolichocephalic races.³ But whether these people emigrated from Asia or not, there can be no doubt whatsoever that their successors of the later Stone age did so, and that they maintained a connection with that country. The proof of this is the fact that, not only in many Swiss Lake-dwellings, but in various parts of Italy, France, Germany and England, jade axes have been found, chiefly in Neolithic remains.⁴ These appear to have been looked on as especially sacred, as, to quote one instance, there were

¹ Lubbock, *Prehistoric Times*, second edition, p. 164.

² De Quatrefages, *The Human Species*, chap. xviii. sect. v. pp. 340-341.

³ *Ib.* pp. 372, 373.

⁴ Lubbock, *Prehistoric Times*, second edition, p. 78.

"eleven beautiful jade celts found in the great tumular mound of Mont St. Michel, at Carnai, in Brittany."¹ This number has a curious coincidence with that of the eleven victims offered in the Hindu annual animal sacrifice to the older gods, and looks as if it implied a similar number of victims as offered at the burial of the chief whose grave is under the mound. But what makes the presence of jade most remarkable is, that it is not found in Europe, and is only now known to exist in large quantities in Turkistan or Western China in Asia.² Among the Chinese a special value has always been attached to it, and it is called the Yu, or gemstone, meaning the first of jewels. Its name in Spanish is "piedra de hijada," or loin-stone, and this and its other name of nephrite, or kidney-stone, both point to some connection between jade and generation, such as that which I have shown was attached in all ancient rituals to sacred sacrificial objects.³ The sanctity of jade must be connected with its colour, and this would make it probable that it was the earliest moon-stone or stone sacred to the moon. This meaning is certainly implied in the name given to it in Turkistan, which is "yeshm," the eye, and if it originally meant the stone sacred to and partaking of the nature of the moon, the early reverence paid to it would be additional evidence proving that moon-worship became one of the earliest concomitants of earth-worship.

At any rate, the presence of these jade axes points to a very early trade and intercourse between Western Europe and Eastern Asia, and seems to prove that the people who used and revered them were emigrants from Asia, and as they were the ruling races of Europe during the Neolithic age, it adds additional evidence to that already given to prove that the gradual extension of Dravidian civilization from the Euphrates valley may have proceeded along two lines, and

¹ Labbeok. *Prehistoric Times*, second edition, p. 155.

² *Encyclopædia Britannica*, ninth edition, art. Jade, vol. xiii. p. 540.

³ See, with reference to this subject, Prof. Robertson Smith, *Religion of the Semites*, Lectures, x. pp. 359, 360, where he shows that according to Semitic ideas the seat of life lay in the viscera, especially in the kidneys and liver. The Egyptians, on the other hand, as the sons of the thinker, looked on the head as the source of life, and did not eat it, Herod. ii. 39.

that a gradual infiltration of Dravidian customs may have been carried on by land, by inter-communication between kindred tribes, while a more rapid movement, resulting in more quickly developed progress, was being effected by maritime trade, which was everywhere the great disseminator of peace, prosperity and improvement.

I have now finished the task I proposed to myself at the beginning of this essay, and have, I hope, conclusively proved the great historical importance of the evidence furnished by the Brāhmaṇas, or ritualistic manuals of the Hindus. The conclusions I have thence deduced are, I am fully aware, new; but I hope that the evidence I have brought forward will be thought by scholars to be sufficient, if not to prove conclusively the truth of all my deductions, at least to warrant the fullest inquiry being made on the same lines by others who are trying to map out the course of ancient history. I am fully aware of deficiencies in this as in my former essays, as there are still in this obscure subject many points on which I have been unable to arrive at conclusions which are more final than that given by a balancing of hypotheses. But I am also perfectly certain that my main conclusions are true; and if further proof is required, I am able to bring it forward under many heads of the argument, should the present proofs be deemed insufficient. I have not now brought out all the evidence I have collected, or anything like it; for if I had done so, my essay would have exceeded all reasonable limits of length. The final conclusions I would submit to the judgment of scholars, as those found in this and the former essays of this series, may be shortly summarized as follows: (1) That the sacrificial observances and evolution of religious thought among the Hindus, as ascertained from a study of the Brāhmaṇas, R̥gveda, Mahābhārata, and other records of early antiquity, show such agreement with those which can be deduced from the mythological and traditional history of Western Asia, Greece, Italy, and Egypt, as to make it almost certain that they all derived their civilization from one common centre, which must have been the Euphrates valley. (2)

That Dravidian tribes allied to the Sumero-Akkadians of the Euphrates valley were not only the first builders of European and Asiatic cities, the founders of the science of government, and the discoverers of the laws of trade, but that they, as worshippers of the mother earth, were the first framers of a reasoned religion. It was they who first saw that duty was the bond that united earth and heaven together, a bond which bound men and gods alike, and who first embodied the conception they had formed of the power of heavenly influence in the deification of the moon-goddess as the queen of heaven, and the source whence the vital power residing in the earth drew its origin. (3) This conception, which was the first sign of the spiritualizing force which henceforth formed the ruling element in religious speculation, was the work of the earliest astronomers, who first found out that the gods were not only generators, but were also gods of time, and that the productive and creative power did not reside in the earth alone, or in the earth and the male father of all beings, but in the power which framed laws to regulate the production and continuance of life. It was the law-giver who was their chief god, and their law-giver was the moon-goddess. It was she who was the virgin mother, the author of law and order, who ordained the times and the seasons, and was not only the fountain of life, but the omnipotent power which fixed the bounds within which alone all created beings could live, move and have their being. Her children were the practical, inventive and silent races who imparted the blessings of civilization to mankind. It was she who was the mother of the Sindhus, now called Hindus, or children of Sin, the moon, and who are also called Mughas or Virāta, while India or Sindya was the land sacred to the moon, from whose sons it derived its earliest culture. The work thus begun was continued, not only in India but in other countries, by the three lunar races called in India Kuṣika, the sons of Kaśyapa or Takshāka, Irāvata or Haihaya, and Vāsuki or Vrishnis, all of which continued to look to the moon-goddess as their chief god. But all of these were apparently aided in their work by the

Northern Aryans, who called themselves the sons of speech, and who by their poetry, eloquence, energy, diplomatic ability, and warlike prowess, succeeded in obtaining complete control of all the countries in which they settled. It was they who worshipped the gods of heaven,¹ and it was under their rule, or that of their congeners the Semites, that sun-worship was introduced, and the sun-god made the ruling god of the solar year, in place of the older god, who, as Vishnu or Kronos, had ruled the first solar-lunar year of twelve months.

APPENDIX.

The following arguments will prove still more conclusively than those I have advanced in the text, that the Mughas who gave their name to Magadha were (1) an Akkadian tribe. (2) That they derived their name from Magha the mother earth, the great mother. (3) That they probably were the earliest framers of a sacred ritual within the Euphrates valley and India. (4) That they took the name Magha to distinguish themselves from the neighbouring tribes, who worshipped local deities and totems; and (5) That the great advance in religious thought shown in the substitution of a universal and national god for tribal deities is not only a proof that its authors were the rulers of an extensive territory inhabited by many tribes, but is also one of the many proofs of the great superiority of this people over their neighbours. It was the consciousness followed by the recognition of this superiority which enabled them to organize trade, foster peace, and to impose their authority over all the countries into which they were led by their cautious love of gain. It was this spirit of adventure, coupled with their persevering energy and quick-sighted ability, which enabled them continually to find out new sources of profit; and these acquisitions once made were retained by their firm determination and

¹ The Druids used certainly to offer human beings to the earth, but these sacrifices were probably offered as part of the ritual which the Aryan inhabitants of Gaul and Britain derived from their Turanian predecessors.

their proved capacity to hold that which they had once made their own. It was these qualities and the popularity of their rule, caused by the increased prosperity of the former inhabitants of the countries they occupied, which made the mixed Turanian or rather Dravidian race, whose home was in the Highland country to the east of the Euphrates valley, the masters and civilizers of the world. It was this race combining Northern and Southern characteristics who probably, under the name of Maghas, spread themselves over Asia, Egypt, North Africa, and Europe, and laid the foundations of law, order, and stable government in all the countries where they settled. The name Magha, which, as I have shown, still survives in India, is also found in the name of the great tribe of the Magi, the founders, not only of the religion of Zarathustra, but also, as I shall show, of the much earlier religion based on the worship of the great mother earth. Their name is only once found in the *Zendavesta*, being omitted probably through the suspicions of witchcraft attaching to the name even in those early times, and which gave rise to the scorn which, as Professor Darmesteter hints, was implied in the term. In this one passage the name Moghu occurs in the phrase *Moghu-ṭbis*, meaning "Hater of the Magi."¹ Here the form is precisely the same as that of the Hindi word *Mugha*. But though the name *Moghu* in the *Yasna* means probably the Magian priests, all ancient authorities agree in saying that the tribe who gave priests to the fire and earth worshippers were also called Magi.

For proof that the coincidence of the Hindu and Zend names is not merely accidental we must look to the Akkadian records. We there find that "*mukhkhu*," meaning the great one, was an equivalent title of the priestly order called "*isippi*" meaning the diviners.² The "*mukhkhu*" also appears in the list of the various grades of priests named in

¹ Darmesteter's *Zendavesta*, Introduction, iii. 16, vol. iv. *Sacred Books of the East*, pp. 51, 52; Mill's *Yasna*, lxx. 7, *Sacred Books of the East*, vol. xxii. p. 318.

² Sayce, *Hibbert Lectures for 1887*, p. 62, note 4.

the great epic of Gisdhubar as waiting in Hades on the great god Etanna, the god Ner, and the supreme deity Nin-ki-gal, the queen of the earth. The priests there named are (1) the lagaru or elders; (2) the isippi or soothsayers, diviners, and the "mukhkhu" or great one; (3) the "pāsisu" or anointing priests of the abysses or "apši," who presided over the sea, or great basin of brass in which the sanctifying water of purification was kept in the temples.¹ These last in the Akkadian ritual performed the same office as that entrusted in India to the priests who poured sacred butter over the offerings to the old anthropomorphic gods. Their name, "the anointer," proves that this was formerly their office; but their functions were changed when water was made the symbol of generation, production, and purification, in place of the more ancient blood and fat. The "lagaru," as Dr. Sayce shows, were the Kali or Galli, the eunuch priests of the great mother earth, an order which never passed into India. The "mukhkhu" or "isippi" were equally joined with them in the primacy. But not only the name "mukhkhu," the great one, but also the primary canons of historical interpretation prove that they must have been originally the chief priests of the great mother earth. The eunuch priests who had sacrificed themselves to her must have been an order of later date than that represented by the "mukhkhu." These last must have been the original priests of the goddess for whose service the human victims, whose sacrifice was symbolized by the act of the Galli, were annually offered in the oldest ritual.

I have shown in the History of the Year² that the oldest form of the religion of Zarathustra set forth in the Zendavesta was based on the worship of four goddesses, and the central abyss or vault of heaven called Rāma, the darkness. But the priests of the mother earth were the servants of a still earlier creed, which looked on the mother earth as the supreme deity and only goddess common to all mankind. These priests were called by the Akkadians of Elam "Mukhkhu," and this is exactly

¹ Sayce, Hibbert Lectures for 1887, pp. 62-63.

² To be published in the July number.

the same word as Moghu, the title of the Mazdean priests and people, just as Ahura in Ahura Mazda is the same as the Akkadian Asari and the Hindu Asura. This likeness between the religious terminology and creed of two tribes living so near together as the Magi of Rai and the Akkadians of Elam cannot possibly be fortuitous, and the conclusion that the Akkadian "Mukhkhū" were the same people as the "Moghu" of the Zendavesta seems to me to be irresistible. It was the religion of this people disseminated by its active and energetic votaries throughout Western Asia, Egypt, and South-Eastern Europe, which took the place of the earlier and hazy conceptions of the nature of the higher powers embodied in local divinities and tribal totems. The worshippers of Mugha, who all looked on themselves as her children, called themselves after her name, just as other tribes took the name of their totems, and they also gave the name of the great mother goddess to the holy land of Magāna. This name, "the land of Magāna," used in the annalistic tablet recording the deeds of Naram-Sin, the son of the great Sargon,¹ means the land sacred to the sky (Ana)² and to Maga, which must mean the earth. It denotes the Sinaitic peninsula, which on account of its mineral wealth was looked on as the spot where the gifts of the mother earth were most bountifully bestowed. This sacred land, sanctified by the holy mountain of Sinai, is called the land of the goddesses Ana, heaven, and Maga, earth, showing that it was consecrated to the two great mothers; while the holy mountain, which was the sign of the pregnant mother,³ was consecrated to Sin, the moon-goddess, who was looked on as the measurer of time, and the goddess of parturition. It was in short the land sacred to the three great mothers, the holy triad of the Heaven or abyss, the Earth, and the Moon-goddess.

¹ Sayce, Hibbert Lectures for 1887, p. 31.

² *Ibid.* pp. 186-187, shows that "Ana" is the Akkadian name for the god or goddess of the sky.

³ See Darmesteter's *Zendavesta*, *Zamyād Yast*, 1-7, *Sacred Books of the East*, vol. xiii. pp. 287-289, for the list of the holy mountains, the sign of the life-giving power of the mother earth.

But before these propositions can be looked on as fully proved, the derivation and origin of the name Magha must be solved. I have already shown that Magha is used by Sanskrit writers as the name of the wife of Śiva, and it is also a name of the wife of Soma the moon-god.¹ The wife of Śiva in India was always the mother earth, and it seems to me that the evidence proving that the name Mugha, or its linguistic equivalent, was given to the mother earth by the Akkadians and Medians, is equally conclusive with that which makes the mother earth the wife of Śiva, and the first and greatest god in the Hindu Pantheon. The Akkadian word "mukh" means to bear, to increase, and "mukh" also means supreme, great.² Now the only being who can be called both "the great one" and "the bearer of offspring" must be the mother earth. It is she who, under the name Nin-ki-gal, queen of the earth,³ was the goddess served by the priests called "Mukhkhū," after her original title. In Chinese "muk" means "mother,"⁴ and "mu" is the Akkadian word for the female symbol. Again, in Persian, the word "magh," meaning "a channel or pit," points to an earlier form of the word with a guttural ending. This name appears in the Pahlavi Bahman Yast as that given to the stone-covered border surrounding the sacred circles, within which the nine holes, made for the purification of those defiled by contact with the dead, were dug.⁵

¹ Böhtlingk-Roth give *Harivansa*, 7735, 7955, as references for the meaning Soma's wife, and for that of Śiva's wife they quote the Supplement to Hema-chandra's Dictionary.

² See E-mukh-tilla, the supreme house of life, of which Merodach is said to be the lord. E (house) mukh (supreme) tilla (life) meaning that he is the lord of the mother earth.

³ Nin, the lady of the gal (spirit), see seven "galli" or seven great spirits, Sayce, *Hilbert Lectures for 1887*, p. 268.

⁴ Professor Douglas tells me that lately many Chinese words have been traced to Akkadian roots.

⁵ West, *Pahlavi Texts*, Bahman Yast, ii. 36, *Sacred Books of the East*, vol. v. p. 266, compared with Darmstadter's *Zendavesta*, Fargard 1a and 1b, *Sacred Books of the East*, vol. iv. pp. 119-129, describing the Barashnūm ceremony. See especially 1a 11, p. 122, note 4, which shows that the unclean person was to stand on the stone or hard substance placed on the "magh," while being sprinkled with "gomex," bull's urine, taken from six of the purifying holes, and the sanctifying water taken from the other three. The reason being that he should not defile the pure earth by the contact of his impure feet.

But besides the word "mogha," used in the Zendavesta to mean the Magians, the word "maga," though not in the feminine form, is used to mean the "original cause of all things." Thus in the passage in the fifth Gātha, where it is said, "King Vishtāspa has reached it (wisdom) in the realm of the great cause (Maga)," that is, in the realm of the mother earth which gives life to all things.¹ It was this holy mother earth which was held to be so sacred that she must not be defiled by contact with the dead or anything impure, and it was in reverence for this great mother, who must, I submit, have been called Magā, that the fire-worshippers placed their dead in the Towers of Silence, which are built, like the "magh" of the Barashnūm ceremony, to preserve the earth from pollution.

But though the above arguments seem to me to prove conclusively that the Maga of the Hindus and Mazdeans was derived from an earlier Akkadian Maga or Makha, meaning the mother earth, yet the proof of the further extension of the word to other countries deriving their civilization from the Akkadians, and its universal and deep significance, add great additional strength to the conclusions I have put forward.

All philologists connect the Greek μέγας, meaning a Magian, or an enchanter, or wizard, with μέγας, great,² and the same root Mag appears in the Latin Magnus. When these words are compared with the Akkadian "makh," and the evidence I have brought forward to show the traces of Akkadian influence in Greece and Italy is considered, there can, it seems to me, be no doubt that we have here an Akkadian root which has been incorporated with Aryan languages, and that in the Greek μέγας and in the Latin *magnus* there is the same allusion to the great mother earth as there is

¹ Mill's Yasna, li. 16 (Gātha v.), Sacred Books of the East, vol. xxxi. p. 185, note 1.

² The Sanskrit Mahā, where the guttural is softened; but the hard guttural is retained in the holy name Maghā, derived from a foreign language. In Pali Mahi means the earth, thus giving a further proof that the root Mah in Sanskrit, which appears as Meg or Mag in Greek and Latin, originally meant the mother earth, whose name was expressed by m and a guttural.

in the Akkadian "mukhkhū."¹ She was the great goddess above all local gods and tribal ancestors, who could alone claim the name of the great being. The same noteworthy reverence for the great goddess appears in the Etruscan "max," meaning "one." The Etruscan is, like the Akkadian, an Ugro-Finnic language, and the word max is proved to have been used as meaning one from a list of numbers used on dice. In this last the ace is called max,² the great one, and the relation between the dice and the great mother is shown by the lucky throw consisting of different numbers on each die being called in Greek *Ἀφροδίτη*, and in Latin *Iactus Veneris*.³ As Herodotus tells us that dice came from Lydia,⁴ it is clear that the name for the ace must have been brought by the Etruscans from Asia Minor, and that the name max must therefore be of Asiatic origin, and if so it must probably mean the number sacred to the great mother. Similar commemoration of the deity as the mother of numbers seems to exist in the Latin *unus*, which is certainly very like the Akkadian *an*,⁵ meaning god or star, and does not bear any likeness to the word for *one* in Greek or Sanskrit.

But the proof that the Magha of India are the same people as the Maghu of the Zendavesta cannot be considered complete unless it can be shown that they continued to act in India as the priests and chief worshippers of the mother earth, just as they had originally done in their Akkadian home. That they did so can, I think, be satisfactorily proved. Though not mentioned in the Rigveda under the name Magha or Māgadha, for reasons I shall adduce presently, the country called Māgadha is once mentioned in

¹ The name also appears in the Sanskrit Mahā, great, and in Mahādeva Śiva, who takes the name of his wife Maghā.

² The Etruscan Numerals, by E. Brown, jun., *Archæological Review*, July, 1889, pp. 390-392.

³ Liddell and Scott, s.v. *Ἀφροδίτη*.

⁴ Herod. i. 94; and in Lydia Magnesia was the city sacred to the great mother, whose image was carved on Mount Sipylus near it. Plato, *Laws* viii. Jowett, vol. v. p. 418, speaks of the Magnetes as the people who consecrated holy seats to local deities, and it is the city of the Magnetes or the mother people which he is trying to restore to its pristine state. *Laws* xi. Jowett, p. 491, xii. 517, 542.

⁵ This also appears in the form Unl, the Etruscan form of Juno, the moon-goddess, who is thus, as the *one* great goddess of parturition, the mother of the numbers.

the Atharvaveda, and the tribe called Māgadhas are spoken of once in the Vājasaneyasamhita, and once in the Atharvaveda.¹ The country called Māgadha is named in the Atharvaveda, together with Anga, the modern Bhagulpore, as the two countries bordering the lands under Aryan guidance in the South-East.² In the Vājasaneyasamhita the Māgadhas are said to be addicted to passionate or wailing utterances (atikrushtaya).³ It is from this passage that Weber infers that the race of bards to which the Epic poets belonged were natives of Māgadha or South Behar, where they were the hereditary bards of the Kosala-Videha and Kuru-Panchāla kings.⁴ But the most significant mention of the Māgadha is that in the Atharvaveda.⁵ The passage runs thus: "Religious belief (śraddhā)"⁶ is said to be "the mistress (puniṣshālī) of the Vrātya in the East," and the Māgadhas are said to be "their charms or incantations (mantra)" in the same quarter. In the South, Ushas is the mistress of the Vrātya, and the Māgadha their friend (mitra). In the West, Īrā, that is, the purified mother of the Indra-worshippers, is their mistress, and the Māgadhas their jest (hasa). In the North, lightning is their mistress, and the Māgadha their thunder. The Vrātya here spoken of are described by Manu as the twice-born castes, who have become Sudras by neglect of their sacred duties, and the list of Vrātyas given by him shows that they comprised almost all the ruling races of the country, such as the Avantiyas of Ujen (Malwa), the Mallis, and Licchavis of Eastern India, the Kashyaps of Kashmir and the Northern Punjab, and also of Kosala, where their name is preserved, not only in the name of the country, but also in that of the capital, which is Kūṣi or Benares, and the Dravidas of the South.⁷ But the name

¹ Zimmer, *Altindisches Leben*, p. 35.

² Atharvaveda, v. 22. 14.

³ Vājasaneyasamhita, 30. 5; "heftigen geschrei" is the translation given by Zimmer, and wailing cries or lamentations by M. Monier-Williams, *Sanskrit Diet.*

⁴ Weber, *Ind. Stud.* I. 185.

⁵ Atharvaveda, xv. 2. 1, Zimmer, *Altindisches Leben*, p. 85.

⁶ This is the Sanskrit equivalent of the Pali *Saddhā* "faith."

⁷ Manu, x. 20-22, Bühler's translation, *Sacred Books of the East*, vol. xiv. pp. 405-406.

Vrātya is also another form of the name Virāta, which is applied to the Matsyas or rulers of Western India in the Mahābhārata, and which I have shown to mean the worshippers of the Viru or phallus. They were the snake-worshipping races who were descended from the five snake-kings, and who ruled all the principal kingdoms in India. From the passage in the Atharvaveda it appears that the Māgadhas were the priests of the Virāta kings of the East, which has always been the head-quarters of earth-worship, and it also shows that the Māgadhas were a race as ubiquitous as the Virāta. The magical incantations and spells here spoken of were the first attempts made both by the Indian and Akkadian ritualists to influence the unseen powers by words. It is these spells which furnish the oldest specimens of ritualistic composition, and which were denounced by the later and purer religious reformers. It was in supersession of these early and grossly imperfect attempts that hymns and psalms of penitence, praise, prayer, and aspiration were composed by the Semite prophets of Babylon and Palestine, and the Indian Brahmins, who were the leaders in the great work of religious reform. It was they who in the West made the Māgadhas of the East their jest (hasa), and it was among these Māgadhas that Epic poetry, which was originally composed with a religious purpose, began, and it was they who were always associated with the Virātas, otherwise called Dānavas. The Māgadhas, in short, were the Daityas, who are said in the Mahābhārata to have been the ruling race who preceded the Dānavas, and it was under the constellation Maghā that the two Daitya mothers, Sunda and Apasunda, set forth to conquer the world.¹

But the Māgadhas were not only bards and religious priests, for their occupation is said in Manu to be trade.² It was trade which brought them to India, and it was to secure the trade of the country that they placed their head-quarters in a position which gave them the control of the

¹ Mahābhārata, Adi (Rajyalabhu) Parva, cxxii, p. 583.

² Manu, i. 47, Bühler's translation, Sacred Books of the East, vol. xxv. p. 413.

Ganges and Jumna rivers, and which thus enabled them to rule India.

But it will be asked if these people were, when the Atharva Veda was written, so powerful and respected throughout all India except the west, why are they never named in the Rigveda? These people must have been allied with the Kuṣikas of Kāśi, who were undoubtedly in ancient times the dominant power in Northern India. But the people mentioned in connexion with them are not called Māgadhas, but Bhāratas. Thus in a hymn to Indra in the Visvā-Mitra, Maṇḍala iii. 53, where Indra and Parvata are called to help the Kuṣikas and Bhāratas, Indra is asked,¹ "What help dost thou gain from the sons of the Kikāṣas, who do not milk their cattle nor offer hot drinks to the gods?" Now these Kikāṣas are said by the commentators to be a Non-Aryan tribe living in the Magadha country, but to every one who knows Kolarian habits it is clear that they are Kolarians, as the pure Kolarians are the one agricultural tribe in India who drink no milk and never milk their cattle. These people cannot be the Mughas who gave to Indra the name of Mughavat. But we find in the Mahābhārata, in the account of the birth of Jarasandha, that it was in Magadha that the union of the two tribes, the Kuṣikas of Kosala, and Kāśi, with the Bhāratas, was effected, and it was in the East that the Bhārata power was strongest, and it was they who were subdued by the Kuṣikas. It was also in the East that the Kolarian tribes were most powerful, and it is in the country bordering on Māgadha and Anga that we now find the Kol tribes the dominant race. It is therefore clear that this hymn refers to the Kuṣikas and Bhāratas as an Eastern power. It, or at least part of it, for Grassmann shows it is a composite hymn, was written long after the war of the ten kings, for it speaks of the victory of Sudas as a matter of ancient history (v. 19). But these Bhāratas were not only an Eastern power; for in the war of the ten kings it was a Bhārata confederacy which was defeated by Sudas on the

¹ Rig. iii. 53. 14.

banks of the Ravi in the Northern Punjab. Now these Bhāratas are clearly not only a most powerful eastern tribe, ruling in Māgadha, but are also, like the Māgadhas of the Atharvaveda, an ubiquitous people who are apparently the ruling race everywhere except in the West. This similarity of conditions seems to show that the Bhāratas and Māgadhas were the same people; but if so, why were they who were originally called Mughas called Bhāratas? I have already shown that it is probable that Mugha is derived from the Akkadian root *mukh*, meaning "to bear, to increase," and the Sanskrit word Bhārata is derived from a root "bhri," with the same meaning. Bhārati appears in the Rīgveda among the three sacred mothers, Idā, Sarasvati, and Bharati; and Magha also means the great mother. In a former essay of this series¹ I have derived Bhārata and Bārata both from "bur," the *Ficus Indica*, and have also referred them to the Kolarian "buru," a hill, and I still think that for the unaspirated form of the word this derivation is correct. But though the alternative words Maga and Magha may, and I think probably do, come from a common root, yet their case is different from that of Bhārata and Bārata, for the first two words have been, as I suggest, transferred to Aryan languages from a language so radically different as the Dravidian; but the reasons which justify the neglect of the difference between the aspirated and unaspirated guttural in the one case, do not appear to apply to words which are only found in cognate languages, and it therefore seems unlikely that Bhar and Bar should come from the same root. I have already shown that it is most probable that the Sanskrit name Matsya is a translation of Haihaya, and that both mean "the sons of the fish," and I would in the present case suggest that it is most probable that Bhārata means the sons of the increaser, the great mother, and that it is a translation of Māgha, which has precisely the same meaning. This will explain why it is that the Bhāratas, who appear as one of the chief ruling

¹ Part II. J.R.A.S. April, 1889, pp. 280, 284, 290.

racess of India in the Rigveda and Mahābhārata, and have given their name to the great Sanskrit epic, and have also furnished the Sanskrit name of the country Bhāratavarsha, are practically unknown under this name in vernacular dialects, and that they everywhere in vernacular literature appear as Maghas, and the principal seat of their dominion is everywhere except in the Rigveda called Māgadha.

NOTE.—The Appendix on the History of the Year, referred to several times in the course of this Article, will appear in our next Number.



CORRESPONDENCE.

1. LE THÉÂTRE PERSAN.

Le théâtre persan serait digne d'attirer l'attention d'un littérateur épris de l'Orient musulman et versé dans la connaissance de ses langues. Ses mérites sont tels, à notre avis, qu'une étude générale et approfondie devrait en être entreprise, et nous n'hésiterions pas à l'aborder nous-même, s'il ne nous manquait l'essentiel pour la mener à bien, nous voulons dire un séjour fait en Perse pour juger *de visu* et *de auditu*. Nous n'avons eu entre les mains jusqu'à présent, en effet, pour formuler notre appréciation, que les textes, traductions, et études publiés en Europe, et, tout récemment, l'important manuscrit conservé à Paris, dans le Bibliothèque nationale.¹ Il n'est peut-être pas inutile, dans l'intérêt même de l'étude que nous préconisons, de dresser ici la bibliographie de notre sujet : nous n'avons pas la prétention d'être complet ; il nous suffira de mentionner les principales publications, auxquelles on nous permettra d'adjoindre les articles que nous avons écrits nous-même.

A. Chodzko, *Le théâtre en Perse* (Revue indépendante, Paris, 1844).

De Gobineau, *Les religions et les philosophies dans l'Asie centrale*, Paris, 1865 (Chap. xiii à xvi : le théâtre en Perse ; les tekyehs ou théâtres ; les noces de Kassem ; autres compositions théâtrales).

A. Chodzko, *Théâtre persan : choix de téaziés*, Paris, 1878 (traduction).

¹ Supplé. persan 993, volume de 326 pages, cédé en 1878 par M. A. Chodzko.

Sir Lewis Pelly, *The Miracle Play of Hasan and Husain*, London, 1879 (translation).

Haggard and Le Strange, *The Vazir of Lankuran, a Persian Play*, London, 1882 (text and translation).

A. Chodzko, *L'aventure du vizir du Khân de Lenkeran* (Bulletin de l'Athénée orientale, Paris, 1883).

Barbier de Meynard, *L'alchimiste, comédie en dialecte ture azeri* (Journal asiatique, 1886; texte et traduction).

Le Strange, *The Alchemist, a Persian Play, translated* (The Journal of the R.A.S., London, 1886).

Barbier de Meynard et S. Guyard, *Trois comédies traduites du dialecte ture azeri en persan par Mirza Dja'far et publiées d'après l'édition de Téhéran*,¹ Paris, 1886 (texte).

A. Cillière, *Deux comédies turques de Mirza Feth-Ali Akhond-Zadé*, Paris, 1888 (traduction).

Barbier de Meynard, *L'ours et le voleur, comédie en dialecte ture azeri* (Recueil de textes et de traductions publié par les prof. de l'Ecole des langues orientales vivantes, à l'occasion du viii^e congrès international des orientalistes), Paris, 1889 (texte et traduction).

Les travaux où l'on trouve les renseignements les plus complets sur l'histoire et l'état actuel du théâtre persan, renseignements fort insuffisants d'ailleurs, sont ceux de MM. Chodzko et de Gobineau. On peut consulter aussi l'introduction de M. Cillière à sa traduction de deux comédies turques.²

Lors qu'on veut parler de théâtre persan, c'est-à-dire d'un théâtre vraiment national et original, il faut éliminer de prime abord toute une partie du répertoire que l'on rattache d'habitude à ce nom. Les représentations si populaires du Karagueuz doivent en être résolument retranchées : ce genre de spectacle, connu en Perse depuis fort longtemps, et dont

¹ Le recueil, rédigé en dialecte azeri, des comédies de Mirza Feth Ali de Derbend, a été imprimé à Tiflis en 1868, et la traduction persane de Mirza Dja'far a été lithographiée à Téhéran de 1871 à 1874.

² Voy. aussi les articles que nous avons publiés; *La Religion et le théâtre en Perse* (Revue de l'histoire des religions, Paris, 1887). *Le théâtre en Perse*, Genève, 1888. *La réforme de la société par le théâtre en Perse* (Vie chrétienne, Nîmes-Paris, 1889).

les origines sont si obscures, n'est point spécial à l'Iran. La farce improvisée ou تماشا est un divertissement qui ne mérite pas d'être classé dans l'art théâtral proprement dit; ce n'en est que l'enfance, que le balbutiement.

Quant aux comédies de Mirza Fèth Ali, qui, dans le texte persan, portent improprement le qualificatif de تماشا, elles n'appartiennent qu'indirectement au théâtre persan, d'autant plus qu'elles ne paraissent point avoir été jouées en Orient, où elles n'ont eu qu'un médiocre succès de lecture. L'auteur, Mirza Fèth Ali, était d'origine tartare, et il a écrit en ture azeri. Ses comédies, d'ailleurs, ne sont qu'une imitation, un pastiche, des comédies européennes, plus particulièrement du genre français ancien. Officier au service de la Russie, Mirza Fèth Ali s'était enthousiasmé du théâtre européen, à Tiflis, et, convaincu que la scène peut devenir un moyen de propagande morale, le théâtre un foyer de sainte contagion pour la réforme des mœurs et des idées, il prit la plume, et écrivit des comédies orientales modelées sur les productions théâtrales moralisatrices de l'Occident. Ces pièces, de fort médiocre valeur, mais qui ne sont pas sans intérêt, manquent presque entièrement d'originalité; peut-être faut-il en excepter "l'Alchimiste" (مؤبد ابراهيم خليل كيمياگر). Ce sont des comédies à tendance, démonstration d'une vérité morale, préconisation d'une réforme administrative, glorification du gouvernement russe: elles rappellent de loin le théâtre de Voltaire. Plusieurs mêmes se terminent par une moralité récitée par l'un des principaux personnages: c'est le cas pour les deux comédies intitulées: خرس قولد وور باسان - وزير خان لنگران.

Le véritable théâtre persan est celui des drames religieux: le عزيمت constitue le fond même de l'art théâtral iranien. Notre intention n'est point d'affirmer par là que ces œuvres dramatiques, si populaires, approchent de la perfection; elles en sont au contraire fort éloignées. L'action, le nerf même du drame, en est à peu près absent; la composition en est très lâche, et le style, malgré ce qu'il a de brillant et de poétique, rempli de répétitions. Comment pourrait-il en être

autrement, étant donné que ces ouvrages ne sont point écrits, mais simplement improvisés sur un thème connu et déterminé d'avance ? Ce défaut capital est sensible jusque dans les rédactions de *تعزیه* mises à la portée des Européens, ou faites sur leur demande ; il est particulièrement sensible dans le "Miracle Play of Hasan and Husain, collected from oral tradition by Sir Lewis Pelly," improvisation hâtivement rédigée. Malgré ces graves déficits, le drame persan a des mérites de premier ordre, surtout une grandeur étonnante et un souffle puissant, qui éclatent aux yeux des auditeurs le plus ignorants du monde oriental, des idées musulmannes et des préjugés schiites. Nous nous sommes, à plusieurs reprises, rendu compte de cette impression, en déclamant devant le grand public tels fragments pathétiques, dignes des grands maîtres, surtout le fameux dialogue entre Abbas mourant au camp de Kerbéla et Hussein, dans le *تعزیه* qui porte le numéro xvii dans le manuscrit de Paris, et qui roule sur le martyre du héros schiite. Jamais la formule de la profession de foi islamique, لا اله الا الله لا ne nous a paru aussi grand qu'à la fin de cette tirade magistrale, où Abbas expirant la profère avant de rendre le dernier soupir ; quelle n'a point été notre surprise de constater que notre impression, de nous enthousiaste du *تعزیه*, était partagée par nos auditeurs, qui appartenaient aux diverses classes de la société ! C'est que le fragment que nous lisions était classique en son genre, nous voulons dire parfait, sinon dans la forme littéraire, du moins dans l'expression de l'idée et du sentiment moral, résultant de la situation matérielle et physique.

Les caractères essentiels du drame religieux, ceux qui lui assurent sa valeur actuelle et lui préparent un avenir, que nous nous plaisions à nous représenter brillant, sont faciles à discerner et à énumérer. Nous les formulerons succinctement comme autant de thèses, démontrées ou à démontrer dans l'étude d'ensemble dont nous souhaitons l'apparition :

1°. Le *تعزیه* ou drame religieux persan est avant tout une œuvre nationale persane. C'est la Perse moderne, avec ses traditions modernes (nous entendons par là celles qui ne remontent pas au delà de sa conversion à l'Islamisme), qui y

vit tout entière. Le patriotisme, un patriotisme d'une nature spéciale, s'y déploie et le pénètre de la façon la plus intime.

2°. Le *تعزیه* est en même temps une œuvre pie : la religion nationale, l'hérésie schiite, avec son histoire et ses préjugés, en est le fond et la forme, la chaîne et la trame, le canevas et la tapisserie qui le recouvre. Or tout ce que la religion enveloppe et remplit, participe de sa grandeur et de son importance unique : la religion est le souverain bien de l'homme.

3°. Le *تعزیه*, et cette affirmation n'est que la conséquence des deux précédentes, est une œuvre profondément originale parce qu'il est, de sa nature et de son essence, absolument islamique. L'Islam affirme l'étroite union, si ce n'est la confusion de la vie sociale et individuelle, de l'Etat, de la politique, du droit, de la science, de la littérature, etc., avec la religion. Le drame religieux persan est un exemple frappant de ce mariage indissoluble. Le Schiite, à l'ouïe du *تعزیه*, se sent vivre à la fois comme Perse et comme musulman, ou mieux tout se fond, pour lui, dans l'affirmation du schisme, foi, histoire, patrie.

4°. Etant donnés ces caractères, le *تعزیه* peut, sous l'influence de circonstances que nous ne saurions prévoir, circonstances religieuses¹ avant tout, devenir le point de départ d'un mouvement patriotique, d'un relèvement national, d'une rénovation sociale. L'avenir nous dira si nous n'avons pas trop présumé des qualités morales et des énergies latentes du peuple iranien.

Les thèses, que nous venons d'énoncer, sont-elles fondées ? Quelqu'un entreprendra-t-il le travail d'ensemble, dont nous croyons l'utilité et l'intérêt évidents ? Pour nous, qui professons comme des convictions les affirmations résumées plus haut, nous ne reculerions pas devant cette tâche, si la perspective d'une vérification sur place des principales données du problème nous était assurée. C'est dans l'incertitude où

¹ Dans la première étude que nous avons publiée sur ces questions, en 1887, nous signalions parmi ces circonstances le Bâbyisme, c'est-à-dire une réforme religieuse dont on ne saurait exagérer l'importance.

nous nous trouvons encore à cet égard, que nous avons cru devoir signaler le point de vue auquel une pareille étude devrait être abordée.

EDOUARD MONTET.

The Secretary of the Royal Asiatic Society.

2. THE TRISŪLA.

SIR,—With reference to Mr. Simpson's paper, and the discussion which followed it, I would venture to call attention to some very remarkable coincidences, so remarkable that, even if any interpretation suggested should prove to be wrong, the coincidences themselves must be considered worthy of serious attention.

1. The trisūla bears a very strong resemblance to the ancient ideographs for the fire-stick, as given by Major Conder.

Hittite.



Cypriote.



Cuneiform.



If these be really all correct interpretations, which seems to be generally accepted, the Cypriote form would appear to have preserved the shape from which the others may have been developed.

2. We find in the Śatapatha Brāhmaṇa (1. 3. 3, vol. xii. p. 87, of Eggeling), that the priest, in dressing the altar for the sacrifice of the new moon, is to lay first in the centre of the altar the wood of the sacred fire (Agni). Round this he is to place three inclosing sticks (paridhis) in the form of a triangle. The mystic interpretation given for this is that those three sticks, representing the three former Agnis, are to protect the new Agni from the thunderbolt (§ 14, p. 88). These three former Agnis are (§ 17, p. 89) the Lord of the Earth, the Lord of the World, and the Lord of Beings. I have tried to show in my paper in this Journal that these really mean the Mother-earth, the Father-god, and the Moon-god. Then the priest is to use a samidh (kindling-stick) to set light to the basis of the triangle; and

then he is to lay the kindling-stick (still traversing the basis) across the wood which is to form the new fire. He will naturally lay it from the centre of the base to the apex. Now the base is to the west of the fire. We thus arrive at the following figure:



3. Now it is very odd that the ideograph or sign for woman in the very oldest Cuneiform inscription at Telloh, as shown in Armiand and Michenseau's *Tableau Comparée des Ecritures Babylonniennes et Assyriennes*, p. 65, is



which is the same shape as the figure formed by the mystic fire (without the central wood of the newer Agni), though it is turned in a different direction, unless the base towards which the middle stick points without touching is supposed to be facing the west.

4. The *Śatapatha Brāhmaṇa* itself actually interprets the altar, on which the figure given above has been laid, as a woman (*loc. cit.* vol. xii. p. 63), and Agni, in the centre, is regarded as the womb of the god (*Aitareya Brāhmaṇa*, Haug, ii. 51). In attempting to represent the opening of this womb for the mystic birth we should get by opening the triangle a symbol very much like the *Trisūla*, and still more like the symbols for the fire-stick above referred to.

5. In the ancient ideographs for 'altar': thus—

TELLOH.



HITTITE.



we have four signs which have not yet been explained. Can they have anything to do with the four Agnis? Those in the Telloh sign seem really to stand for four flames rising from the altar. But in the Hittite sign a flame or smoke seems to rise from the corner of the altar from four fires burning within the altar, while the cross on the Telloh altar would also seem to represent in its four arms four fires or fire-gods.

The whole inquiry shows the historical value of these very ancient symbols. When letters were unknown, and when, even after the discovery of alphabets, writing materials were difficult to procure and preserve, thinkers who wished to preserve their ideas, and priests who were anxious to secure the permanence of a correct ritual, were obliged to use forms easily depicted and remembered. Symbols were invented for this purpose, and were not only the precursors of alphabets, but were used even after alphabets had been invented, as in the Akkadian ideographs (Sayce, Hibbert Lectures for 1887, p. 3). By the use of symbols long trains of reasoning could be conveyed in signs easily drawn and easily remembered. Sacred numbers and myths were also adopted as guides to the memory for similar reasons to those which led to the employment of symbols, only that in myths the pleasure arising from a told story added a charm to the symbolical representation. It was the business of teachers to show the inner meaning underlying all these fossilized truths, and hence arose the exoteric or popular and esoteric or scientific lectures of which we read in the history of philosophy.

J. F. HEWITT.

The Secretary of the Royal Asiatic Society.

3. MĀDHAVA AND SĀYAṆA.

The following correspondence appeared in the 'Academy' of the 8th and the 15th March, 1890.

Elphinstone College, Bombay, Jan. 30, 1890.

SIR,—The relation between Sāyaṇa, author of the great commentary on the R̥gveda, and Mādhava, to whom the work is dedicated, and who is apparently credited with the authorship in the introductory verses, has been matter of controversy. The late Dr. Burnell was the author of an ingenious theory, according to which Sāyaṇa and Mādhava were only two names for one and the same person. I cannot now refer to Dr. Burnell's book (his edition of the *Vanśa-brāhmaṇa*, 1873), but quote Prof. Weber, *Indian Literature* (p. 42, note). "Sāyaṇa," Burnell says, "is the *bhoganātha*

or mortal body of Mādhava the soul, identified with Vishṇu." Prof. Max Müller (*Rigveda*, vi. Preface, p. 25) refers to the theory, but does not pronounce any very decided opinion. He clings, however, to the view that Śāyana was the brother of Mādhava, the latter living retired from the world, the former being his literary representative.

I do not know if the controversy has proceeded further. But I have lately come upon a statement made by Mādhava himself which ought, I think, to settle it. Mādhava is the author of a commentary on the *Parāśarasamṛiti*, which is extant. In the introduction to that work, as it stands in an old copy which I have recently bought for the Bombay Government, Mādhava gives the following account of his family:

"Śrīmatir jananā yasya sukirtir māyanaḥ pitā,
Śāyano bhoganāthaśca manobuddhī sahodarau."

Prof. Max Müller has already noted (*loc. cit.*) that in the course of his commentary Śāyana describes himself as the son of Māyana and Śrīmatī (as Prof. Max Müller has the latter name). This confirms our verse, which in its turn puts it, I think, beyond all reasonable doubt that Māyana and Śrīmatī, or Śrīmatī, had three sons—Mādhava, Śāyana, and Bhoganātha. The two latter, Mādhava says, were his very "heart and soul." Mādhava in this Introduction describes himself in the usual way as chief minister of King Bukkaṇa. I may, perhaps, add that Prof. Max Müller's statement that the author of the commentary refers to the author of the *Nyāya-mālā-vistara* as "Bhāṣhyakāra," and the inference sought to be drawn, namely, that these two can hardly be the same, should be corrected. The Bhāṣhyakāra of the passage referred to is obviously not the author of the *Nyāya-mālā-vistara*, but Śaṅkarācārya.

P. PETERSON

British Museum, March 8, 1890.

SIR,—On reading Prof. Peterson's letter in the 'Academy' of to-day's date, I at once turned to our copy of Burnell's

Vamsabrāhmaṇa; and as I noted that the edition, like many other of that eminent scholar's works, was a small one (100 copies only), it occurs to me that possibly other readers of the 'Academy' may be in the same position as the scholars of Bombay, and have no copy of the book at hand.

I may mention, then, that Burnell (*op. cit.* p. ix, note), fully discusses the verse quoted by Prof. Peterson. He declares, rather magisterially, that "*bhoganātha* is certainly not a proper name, and never could be taken as such by any one at all acquainted with Indian practice as regards names." I may be only displaying my obtuseness; but, after several years' special study of Indian nomenclature, I own that I cannot see why Bhoganātha should not be a name, when Bhogavarman and Bhogasvāmin occur as such.

Burnell's next observation goes, I venture to think, too far, as he continues: "It is enough to point out that a single instance of this word being used as a proper name elsewhere does not occur; it must, therefore, be taken as an attributive." . . . He might have spoken with equal confidence as to bhogapāla, which the dictionaries give only as an ordinary noun; but it occurs as a king's name (Hamīr-Rāsā in Journ. As. Soc. Beng. vol. xlviii. p. 250).

A-propos of dictionaries, I notice that the verse now re-discovered is cited by Böhrtlingk and Roth (*s.v.* bhoganātha) from Dr. Aufrecht's Oxford Catalogue.

As, however, this subject, which is one of no small bibliographical interest to Sanskritists, has been re-opened, I venture to add two observations.

(1) It is a curious coincidence, at least, that there is extant in Ceylon a Sanskrit medical work, the Bhaishajyakaḥ, attributed to a Māyanna Sāyanna, who is called "minister" (*mantri*), and is described as the "crest-gem of the Māharāja Vīrapratāpa, who reigned from the Eastern to the Western sea." I have not identified this Vīrapratāpa; it might be a title of Bukka, of course. The book was partly printed at Colombo in 1885; but I make no apology for quoting a printed book, as the printed Sanskrit literature of Ceylon and South India is practically beyond the reach of

most scholars. Whether Sāyaṇa really prescribed for his patron's bodily, as well as his spiritual, health, I cannot of course say; but it would be strange if it should turn out that there is a Ceylon tradition of Sāyaṇa, as there is of Kālidāsa. Let me also note that the form of the name lends some colour to Burnell's suppositions that Māyaṇa is not the real name of Sāyaṇa's father, and that the original form of the name was Sayaṇṇa. The Sinhalese often confuse the cerebral and dental nasals.

(2) It remains desirable that in catalogues and bibliographies the works of Sāyaṇa-Mādhava should be entered under one heading, with necessary cross-references. This was the plan adopted by my predecessor, the late Dr. Haas; and in the supplement to his catalogue, which I am now printing for the Trustees of the British Museum, I propose to adhere to it, and to include in the same heading the Pañcadaśī.

CECIL BENDALL.

NOTES OF THE QUARTER.

(January-March, 1890.)

I. GENERAL MEETINGS OF THE ROYAL ASIATIC SOCIETY.

17th February, 1890.—Mr. E. L. BRANDRETH in the Chair.

The election by the Council of Dr. E. B. Taylor and W. H. Verner, Esq., as new members was announced to the Society.

Mr. WILLIAM SIMPSON, M.R.A.S., read a paper on the *Trisūla*, which is printed in full above.

A discussion followed, in which Mr. Howorth, M.P., Mr. Hewitt, Dr. Leitner, M. Bertin, and Mr. Hyde Clarke took part.

21st March, 1890.—The PRESIDENT in the Chair.

The election by the Council of Mr. Grosset, Dr. Arthur Pfungst, and Sir Henry Cunnninghame, K.C.S.I., as new members was announced to the Society.

Mr. H. T. LYON, M.R.A.S., read a paper on a proposed system of uniform transliteration of Arabic and Turkish. The paper will be published in the next issue of the *Journal*.

A discussion followed, in which Sir M. Monier-Williams, Sir Frederick Goldsmid, Mr. Kay, Dr. Leitner, and the President took part.

II. LIST OF PRESENTS TO THE SOCIETY, JANUARY-MARCH, 1890.

From the Secretary of State for India in Council.—The Sharqi Architecture of Jaunpur, by A. Führer, with Drawings by E. W. Smith, edited by J. Burgess. (*Archæolog. Survey of India.*) 4to. Calcutta, 1889.

Catalogue of books published in Ajmere and Merwara, Sept. 1889.

_____ in Bengal, January, 1889.
From the Senate of the Calcutta University.—Henderson (G. S.). The Law of Testamentary Devise as administered in India. (Tagore Law Lectures, 1887.) 8vo. Calcutta, 1889.

From the Madras Government.—Thurston (Edgar). The Coinage of the Territories of the East India Company in the Indian Peninsula, and Catalogue of the Coins in the Madras Museum. 20 plates. 8vo. Madras, 1890.

From the Inspector-General of Chinese Customs.—Imperial Maritime Customs: II. Special Series. No. 2. III. Miscellaneous Series. No. 6. 2 parts. 4to. Shanghai, 1890.

From the French Government.—Mémoires de la Société Académique Indo-Chinoise. Tome 1. 4to. Paris, 1879.

Publications de l'Ecole des Langues Orientales Vivantes.

IIIe. Série, Vol. 3. Nozhet-elhâdi. Histoire de la Dynastie Saadienne au Marve 1511-1670. Trad. par O. Houdas. Royal 8vo. Paris, 1889.

IIIe. Série, Vols. 5, 6. Recueil de Textes et de Traductions publié par les Professeurs. 2 vols. Royal 8vo. Paris, 1889.

Bulletin de la Société d'Ethnographie. Seconde Série, Nos. 4, 11, 18, 19, 20, 24. 8vo. Paris, 1887-8.

Etude d'Archéologie Américaine comparée, par Lucien de Rosny-Fouqueville. Pamphlet. 8vo. Paris, 1864.

Fa-Tsien ("Les Billets Doux"), Poème Cantonais. Trad. par Léon de Rosny. Pamphlet. 8vo. Paris, 1876.

Monuments divers recueillis en Égypte et en Nubie, par A. Mariette-Pacha. Texte par G. Maspero. Livr. 27, 28. Fol. Paris, 1889.

From the Minister of Public Instruction at Cairo.—Yacoub Artin Pacha. *L'Instruction Publique en Egypte.*

8vo. *Paris*, 1880.

From Sir Thomas Wade. École des Langues Orientales Vivantes. No. vii. Recueil d'Itinéraires dans l'Asie Centrale.

8vo. *Paris*, 1878.

From F. F. Arbuthnot, Esq.—Rehatsek (E.). On Hindu Civilization in the Far East, as represented by the Architectural Monuments and Inscriptions. Pamphlet. Map.

8vo. 1888.

From Sir Dinshaw Manockjee Petit, Knight.—Petit (Framjee Dinshaw). Travels in Europe, America, China and Japan (1887). Gujrati Text, with Illustrations.

8vo. *Bombay*, 1889.

Patell (Bomanjee Byramjee). Parsee Prakash. A Record of Events in the growth of the Parsee Community in Western India. Vol. i.

4to. *Bombay*, 1888.

From the Authors.—Bühler (G.) Das Sukritasamkirtana des Arisimha. Pamphlet. (From *Sitzung. der Kaisertl. Akad. der W. in Wien.*)

8vo. 1889.

Prof. Terrien de Lacouperie. Babylonian and Oriental Record. Vol. 4, No. 3.

Darmesteter (James). Chants Populaires des Afghans.

Imp. 8vo. *Paris*, 1888-9.

Pincott (F.) The Hindi Manual. 3rd Ed.

Post 8vo. *London*, 1890.

Pincott (F.) Bala-Dipaka,—Hindi Readers. 4 parts.

Post 8vo. *Bankipur*, 1887-9.

Pincott (F.)—[Editor] Ayodhya Prasād, Khatri. Kharī Bolī kī Padya. Poetical Reader.

Post 8vo. *London*, 1889.

Salmoné (H. A.)—Arabic-English Dictionary. 2 vols.

8vo. *London*, 1889.

M. de Zilva Wickremasinghe. List of the "Pansiyapanas Jātaka," the 550 Birth-Stories of Gautama. (*From the Chinese Branch Journal.*) Pamphlet.

1887.

III. CONTENTS OF FOREIGN ORIENTAL JOURNALS.

1. JOURNAL ASIATIQUE.

8me série, tome xiv. September, 1889 (received 14th March, 1890).

Victor Loret. Les flutes égyptiennes antiques.

Clement Huart. Un Manuscrit pehlevi-musulman.

Jules Perruchon. Les Guerres d'Amda Syon.

8me série, tome xv. January 1890 (received 14th March, 1890).

P. Sabbathier. L'Agnishṭoma d'après le Śrauta Sūtra d'Aśvalāyana (translated into French, and notes).

2. ZEITSCHRIFT DER DEUTSCHEN MORGENLÄNDISCHEN GESELLSCHAFT.

Vol. 33, part iv. October, 1889 (received 22nd February, 1890).

K. Himly. On terms used in games.

W. Geiger. Baluchi Texts and translation.

R. Roth. On the Indian Fire stick.

O. Böhtlingk. The author of the Hitopadeśa.

O. Böhtlingk. On alleged irregularities in language in Hiranyakeśin's Grihya Sūtra.

O. Böhtlingk. The Goat and the Knife.

O. Böhtlingk. On attraction in gender in Sanskrit.

P. Horn. The decipherment of Pahlavi.

W. Bacher. Dust in the mouth.

J. Zubaty. Metre in the Mahābhārata.

F. Hommel. Words for Wine in South Semitic.

C. Bartholomæe. Aryan notes.

R. V. Stackelberg. Ossetian notes.

W. Baury. The religion of the Achæmenidians.

3. WIENER ZEITSCHRIFT FÜR DIE KUNDE DES MORGENLANDES.

Vol. 4, part i. January, 1890 (received 10th March, 1890).

J. Zubaty. Metre in the Vedas.

P. J. Dashan. On the Abgar legend.

- I. Kunos. Turkish popular songs.
 J. Kunste. Notes on the Sarva-sammata Śikshā.
 W. Tomaschek. Geography of South Asia.
 J. Klatt. The date of the poet Māgha.

IV. OBITUARY NOTICES.

Sir E. Colebrooke.—At the meeting of the Council of the Royal Asiatic Society on December 16, 1889, and at the meeting of the Society held afterwards to discuss certain matters connected with the International Oriental Congresses, was present among us for the last time for 54 years Sir Thomas Edward Colebrooke, Bart., who had repeatedly filled the office of President, and was still our Vice-President, when he died, January 11, 1890. We shall never see his like again, as he was the only surviving son of our Founder, the illustrious scholar Henry Thomas Colebrooke, who died in 1837, and in the Fifth Volume of the first Series of our Journal, 1838, when all the present Council were still at their public schools, appears the first contribution of our lamented friend and Vice-President, who wrote a long and interesting account of the life and labours of his father. It falls to few to enter a learned Society at so early an age, and to take a sympathetic and intelligent interest in it for more than half a century. All those, who listened to his first contributions, have long since passed away. He was our oldest elected member by many years.

Sir Edward was born in Calcutta in 1813. His mother died in 1815, and his father then left India finally, bringing with him his motherless children. His grandfather, Sir George, belonged to a family settled in Kent: he was member for Arundel in three Parliaments, and was Chairman of the Court of Directors. He succeeded to the Baronetcy, which had been conferred in 1759 on his elder brother, with remainder to him. Both his sons went out in the Bengal Civil Service: the elder, Sir James Edward, was Resident at Dehli, and died without issue in 1838. The second son,

Mr. Henry Thomas, was Chief Judge of the Saddur Court of Bengal, and member of the Bengal Council, and out and out the greatest Oriental scholar of his time, both in the originality of his researches, and the soundness and accuracy of his knowledge. His name is revered, and his opinions appealed to, still in the Oriental side of every Continental University.

The subject of this memoir was his third son: both his brothers predeceased their father. He was educated at Eton, and being destined, as a younger son, to the Bengal Civil Service, he was sent to the East India College at Haileybury in Hertfordshire, and arrived in India in 1832. He had acquired a knowledge of Indian languages at the College, and he himself mentions in his Obituary Notice of Mr. Colebrooke, that his father had "been urgent in recommending him to the study of Sanskrit on account of its utility to a member of the Civil Service, but he never expressed the slightest hope, that his son would imitate his example, or turn to Oriental study, except so far as it was connected with professional pursuits. This is not an unusual phenomenon: great scholars rarely have sons, who take the least interest in their fathers' studies, and so entirely is the aptitude for scholarship a personal gift, that few scholars, if any, take the trouble to recommend their sons to qualify themselves. "*Poeta nascitur non fit.*"

In 1836 a great sorrow fell upon Mr. Henry Colebrooke; his eldest son, who had been the companion of his old age, and the sharer of his studies, and his attendant during his long illness, died: and the subject of this memoir, the last of the race, was sent for from India to soothe the closing days of his sorrowing parent, and the great scholar died on March 10, 1837. His elder brother, Sir James Edward Colebrooke, followed him to the grave November 5, 1838, and Sir Thomas Edward succeeded to the family title; twenty years later he married, and is now succeeded by his son, the present Sir Edward Arthur, born in 1861.

For nearly forty years the late Sir Thomas Edward Colebrooke sat in the House of Commons, on the Liberal

side. He represented Taunton from 1842 to 1852, and Lanarkshire from 1857 to 1868, and the Northern Division of that county from that year till 1885. In 1886, as a Liberal Unionist, he contested the seat of North-East Lanarkshire, but was defeated, and his Parliamentary career ended at the age of 72. He was Lord Lieutenant of Lanarkshire.

A list of his contributions to the pages of our Journal is appended. In addition he published the following works:—

1. Life of Mount Stuart-Elphinstone, Governor of Bombay.
2. Essays. By Henry Thomas Colebrooke. 2 vols. 1837.
3. "The Creeds of India," a pamphlet privately printed in Scotland.
4. "Small Holdings"; it is sadly interesting to record, that he had just sent a fresh edition of this book to the printer on the day that he fell ill.
5. He edited and published a third volume of Elphinstone's India.

His acquaintance with national affairs was great: he was a man of excellent and judicious temperament, and his speeches were always of a thoughtful, well-considered, and suggestive character. On Educational matters he was an authority, and was Chairman of the Endowed Schools and Hospitals Commission for Scotland. Though he came to Scotland a perfect stranger, he conciliated to himself the love and confidence of his constituency in Lanarkshire to the highest degree: his portrait, at their request, was painted for the County Hall, and a copy presented to Lady Colebrooke. We have on the walls of the room of our Society an excellent photograph, which will recall the features of our lost and honoured friend.

Without laying claim to the title of a scholar himself, he occupied the very important position of a scholarly statesman, who from his earliest days to the last month of his life, sympathized with Oriental scholars, and with research in every branch of the subject. He was worthy of the great name among scholars which he inherited. Some years ago I went down to the House of Commons with Professor

Whitney of Newhaven, United States, and meeting Sir Edward Colebrooke, I delighted the American Professor by presenting him to the son of the great old scholar, who revealed the learning of the Indians to Europe, and whose name was a household word to every student of Sanskrit.

As an illustration of his kindly feeling to the Royal Asiatic Society, it may be mentioned, that though he had compounded for his subscription years before, yet, when the Society twenty years ago fell into financial trouble, he volunteered to become again a subscribing member, and continued so to the end. He was constant in his attendance at the Council, taking a lively interest in our welfare; when the question was discussed of the union of this Society with the new Imperial Institute, Sir Edward took the lead in the negotiations. If his style of elocution, and indeed of conversation, was rather dry and restrained, yet those, who were privileged to know him, were confident of his kindly and benevolent nature; and his stately form and thoughtful countenance will long be missed. There is but one surviving representative of the great men, who made the Royal Asiatic Society illustrious for so many years, Sir Henry Rawlinson, and the conduct of affairs has passed into the hands of a younger generation.

Jan. 1890.

R. N. C.

Elected 1836. Paid Resident Member's Composition. Renewed his contribution as a Resident Member from 1861 to 1890. Appears first on Council 1842-44. Off for one Session. On again. Only off by rotation till 1861, when he was elected Vice-President. President 1864-6. Vice-President 1867-74. President 1875-7. Vice-President 1878-80. President 1881 for that year (1881) only.

Contributions to Journal of R.A.S.

Memoir of Mountstuart Elphinstone. XXVIII. p. 221, *o.s.*

Note on Professor Whitney's Article. I. p. 332, *n.s.*

"On Imperial and other Titles." IX. p. 314, *n.s.*

"On the Proper Names of Muhammadans." XI. p. 171, *n.s.*

V. NOTES AND NEWS.

Mr. Abbott writes as follows to the *Bombay Gazette*:—

Discovery of hitherto unknown Buddhist Caves in the Konkan.—SIR,—Students of Indian antiquities will be interested to know of the discovery of ancient Buddhist caves, which it was my fortune to make on the 10th of December, the existence of which I have been assured by both Mr. Fleet and Mr. Cousens has been hitherto unknown to antiquarian scholars. The caves lie in the southern position of that part of the Bhore State which lies in the Konkan, near the village of Nenauli, lat. $18^{\circ} 30'$ and long. $73^{\circ} 23'$. From a study of the position of other known caves at points along the ancient highways from the Deccan to the sea, I had conjectured the probability of some caves in the western ghats near the sources of the Kundalika river, which empties into the sea at Rewadunda. The identification of the modern Chaul, near Rewadunda, with the ancient and important commercial city of Simylla, mentioned by Ptolemy, made it still more probable that the bed of the Kundalika must have been an important highway from the Deccan to the sea. I had, therefore, made frequent inquiries in regard to antiquarian remains, but without success, until a few weeks ago, while on a missionary tour in the Roha Taluka, I learned that there was a rock temple at Gomashi, dedicated to Rishideo, about nine miles up the river to the east of the main road from Nagotna to Mahad. I accordingly visited this cave and found it to be but a plain single cell, about 15ft. by 7ft. with an image of Buddha, in the position called the *Bhumisparsha mudra*. There were no inscriptions to be found, or any ornamentation. The cave lies to the south of the village in the gorge of a hill. An annual pilgrimage is held here in the month of *Shravan*.

My disappointment at this rather insignificant find was soon dispelled by learning from the villagers of extensive caves, about four miles up the river among the mountains. The sun was hot, but enthusiasm was keen, and after a long walk and a steep climb my guides took me along the foot of

a high scarp, where were many natural caves running far into the mountain, and in which the tigers that trouble the villagers below made their dens, so I was assured. After passing well along the east side of the scarp we came first to a few small cells, and then to a large and imposing hall, the chief feature of these caves. This hall, where the Buddhist monks used to assemble, is 69 feet by 52½ feet, with a flat roof entirely unsupported, although from the square holes that appeared in the roof at short intervals around the central court, it would seem that wooden posts must have been used when the cave was first hewn. The height of the roof from the floor over the central court is 9¾ feet. Surrounding this large hall on three sides are seventeen cells, nearly all 7½ feet by 7½ feet, with a stone bed on each. At the north-west corner is a larger room, 18 feet by 24 feet, the *Chaitya* shrine in which at its further end is the dagoba, or emblem of Buddha. The central portion or court of the hall, 51 feet by 43½ feet, is cut down a foot and a half, thus leaving a verandah 9 feet wide around the entire hall, except where intercepted by the *Chaitya* shrine. Outside of this hall, along the scarp of rock both to the right and left are many cells of varying sizes, each with its stone bed.

This *vihara* is perfectly plain. There are no images of Buddha, no carvings, railings, or any ornamentation whatever, nor could I find during my short stay any inscriptions. Following the principles laid down by Dr. Burgess in his "Cave Temples of India," for determining the date of such remains, it would appear that these are certainly as old if not older than those at Kuda and Mahad, which Dr. Burgess classes amongst the oldest, as being somewhere between 200 B.C. and 50 A.D.

Unfortunately from lack of time, I was unable to explore these caves for only the short space of an hour, and, therefore, took measurements of the large hall only. I intend visiting these caves again shortly, and it is possible that further search may lead to discoveries of still greater interest.

Yours, etc., J. E. ABBOTT.

Jātakas in the Arabian Nights.—The story of the Efreeth who kept his wife in a box (Lane, vol. i. pp. 8, 9) is like the Jātaka, a story of a Vijjādhara, who kept his wife in a box. Both the wives circumvent their jealous masters. The story of the parrot in Chapter II. is analogous with the Rādha Jātaka. The parrot is left to be a spy on the wife, and in each case, owing to a trick of the faithless wife, is discredited and killed by the husband. Chaucer also refers to this tale (Wife of Bath, 1, 231), and it is included in the "Seven Sages" (Wright's edition, p. 73).

Ceylon Coins in the Madras Museum.—Mr. Edgar Thurston, the superintendent of the Museum, gives in the former of the two papers referred to in the last paragraph, a complete catalogue of these coins. It appears that they have there a specimen of one hitherto unknown coin, a copper LANKEŚVARA, differing from the gold one, of which several examples had previously been known in the nature of the material only.

Roman Coins in South India.—A detailed account of all the known finds of Roman coins up to date was given in Mr. Edgar Thurston's Catalogue of Coins in the Madras Museum (No. 2), published in 1888. In the "Numismatic Chronicle" (1889, part iv.), the same author gives a full description of fifteen gold coins of the Roman Empire recently found at Vinukonda in the Kistna District, and now added to the Museum.

South Indian Inscriptions.—The Madras Government have issued Dr. Hultsch's report of his work as epigraphist from October to January last. The most important finds have been made at the Siva (Beltree) temple at Tiruvallam, formerly called Tikkali-vallam. One of the inscriptions there is dated on the day of an eclipse, which Mr. Fleet has identified with one that took place on the 26th September, 1010. This makes it possible to fix exactly the years of the reign of the Chola king Ko Rajaraja Kesari Varman. His reign must have lasted from 1004–1032 A.D., and the inscriptions dated in the regnal years of his successor, Rājendra Chola, can be calculated accordingly; while the dates of certain kings of the Ganga and Bana dynasties, mentioned

in these inscriptions, can be fixed approximately. The first volume of the "South Indian Inscriptions" is, we are glad to see, nearly ready for issue.

Indian Chronology.—Professor Kielhorn has published at Göttingen (Dietrich's) a series of very useful tables for the calculation of Jupiter years according to the rules of the Sūrya Siddhānta and of the Jyotistattva. The same scholar has contributed to the "Nachrichten von der Kön. Gesell. der Wissenschaften und der Univ. zur Göttingen," for 1889, some notes on the Vikrama year beginning with the month Āshāḍha, used in Gujarat from the sixteenth century onwards. He also shows that the word Śake in an inscription sometimes means merely 'in the year' (viz. of Vikrama, etc.) and not necessarily 'in the Śaka year.' And he then discusses the Saptarstri or Sāstra era; suggesting finally that the dates of the two inscriptions published by him in the "Indian Antiquary," vol. xvii. pp. 11-13, are Friday, the 2nd April, 1025, and Monday, the 18th August, 1035.

Chinese Games with Dice.—Mr. Stewart Culin has published at Philadelphia a paper read before the Oriental Club in that city on Chinese dice. It gives an account of various games, chiefly played by people of the labouring class, and is illustrated in colours. Mr. Culin intends to follow this with similar papers on other Chinese games.

Coinage of the East India Company.—By way of preface to his "Catalogue of the Coins in the Madras Museum," Mr. Edgar Thurston has compiled a very interesting and useful history of the coinage in the territories of the East India Company in the Indian peninsula.

VI. REVIEWS.

THE PHILOSOPHY OF THE MAZDAYASNIAN RELIGION UNDER THE SASSANIDS. Translated from the French of L. C. CASARTELLI by FIROZ JAMASPJI DASTUR JAMASP ASA. (Jehangir Bejanji Karani: Bombay.)

The Parsi community in Bombay may be heartily congratulated upon the steadily increasing enlightenment and

usefulness of their priesthood. While most of these priests have liberally assisted the preparation of the new edition of Avesta Texts by the loan of valuable MSS., the high-priest has himself been editing the *Dinkard* and other Pahlavi texts, and his son has published an English translation of an important German work on the Civilization of the Eastern Iranians in Ancient Times. In the meantime Dastur Dr. Jamaspji Minocherji has competed in usefulness and learning by publishing a Pahlavi Dictionary, and now we have a very useful French work translated into English by his only son, whose early and sudden death, an irreparable loss to his aged father, we have to deplore.

Such translations are, of course, chiefly intended for the Parsis themselves, to enable them to learn the opinions and conclusions of foreign European scholars; but they are also useful to any Englishman who takes an interest in the Parsi religion and customs. As the author himself certifies the accuracy of the translation, it is perhaps needless to remark that the translator must have possessed a very complete knowledge of the French language; but the reader must be on his guard against several perplexing misprints.

The work itself is an interesting and well-arranged summary of most of the information contained in the Bundahish and other translated Pahlavi texts, regarding the good and evil spirits, cosmology, ethics, and eschatology of the Mazda-worshipping religion in Sasanian times, with many additions from the third book of the *Dinkard*, translated by the author. When, however, the author adopts the statements of later writers, or those of foreigners of other faiths, he does not sufficiently warn the reader that such statements must be accepted with greater reserve than those of contemporaries and natives. And it is soon evident to the attentive reader that the author's mind is pervaded by one fixed idea, that the monotheism of the Mazda-worshippers, with all that seems commendable in their religion, *must* have originated from Jewish or Christian influence, if it bears even the slightest resemblance to the doctrines of those faiths. The translator's notes often protest against the

conclusions of the author based upon this idea, and I must confess myself sufficiently heretical to imagine that the influence may have been sometimes in the opposite direction, especially at the time of the Jewish captivity.

In order to trace the monotheism of the Mazda-worshippers to Hebrew influence, it is necessary to suppose that Zarathushtra lived at the latest possible date, some time subsequent to the transportation of the Samaritan Israelites to Media by Shalmaneser (2 Kings xvii. 3-6) about a.c. 721. This hypothesis is not discussed by our author, because he is not considering the origin of the Avesta; but, in his introduction and chronological table (pp. i-iv of the translation), he adopts, as ascertained facts, the views so ably propounded by de Harlez in his *Introduction à l'étude de l'Avesta*, pp. 158, 159, 199-212. Now, with regard to this hypothesis, I fear that my friends, de Harlez and Casartelli, and myself must agree to differ to a considerable extent. I do not assert that the hypothesis is impossible, but I do say that it rests upon very slender foundations and is open to some objections, more or less serious, which I will briefly mention.

Regarding the era of Zarathushtra we have really not a single historical fact to guide us, because the statements of old writers differ so widely as to be mutually contradictory, and the chronology of the Bundahish (which seems to agree with that current in Sasanian times) is evidently based upon the notion that king Vishtâspa of the Avesta and his namesake, the father of Darius I., were the same individual; that this was a mistaken notion is proved by the genealogies of the two Vishtâspas being totally different. Under these circumstances we ought still to consider Zarathushtra as a prehistoric personage, until his name is discovered (possibly in some Cuneiform text) in connection with something really historical.

In default of history, we have to fall back upon circumstantial evidence of uncertain character. The Hebrew-influence hypothesis assumes that Zarathushtra lived about a century before Darius I., and that the latest Avesta was completed nearly two centuries after that king began to

reign; thus allowing nearly three centuries for the composition of the whole Avesta. There is, however, an essential difference between the name of the Supreme Being employed in the Persian Cuneiform inscriptions and that used in the Avesta, which renders this assumption doubtful. In the Gâthas, which are acknowledged to be the composition of Zarathushtra and his immediate disciples, the two titles of the Supreme Being, Ahura and Mazda, are not only independent words separately declined, but are also generally used separately, and, even when put together, Mazda usually precedes Ahura. Thus, in the seventeen hymns of the Gâthas we find Mazda 98 times alone, Ahura 47 times alone, Mazda Ahura (often separated by intermediate words to suit the metre) 64 times,¹ and Ahura Mazda (often similarly separated) only 19 times, or one-twelfth of the whole number of occurrences. It is only natural to suppose, from these facts, that when the Gâthas were being composed, the compound title Ahura Mazda was in the course of manufacture, and only rarely used in its final Avesta form. And, if this were the case, we are hardly justified in imagining the existence of the complete title Ahura Mazda before the time of Zarathushtra. In the later Avesta we only occasionally find Mazda and Ahura alone, or in the form Mazda Ahura, because the new form Ahura Mazda greatly preponderates; still the two words are always independent and separately declined. Turning to the Persian Cuneiform inscriptions, we find a further change, as the name of the Supreme Being has become condensed into the single word Aûramazdâ, of which the former component is indeclinable in about 120 instances. If this change were universal, it might be argued that it was due solely to change of dialect; but there are two instances in which both components are declined, just as in the later Avesta. These two instances were inscribed in the time of Xerxes, and are just sufficient to show that the old form of the name was not yet quite forgotten by all his

¹ These first three numbers should be considered as only near approximations to accuracy, but the fourth number is much more certain.

scribes, although disused by their contemporaries and also by their predecessors in the time of Darius. What we may suspect, from this change of form, is that a considerably longer period had elapsed, between Zarathushtra and Darius, than the Hebrew-influence hypothesis assumes; because we have to account for a change which the Avesta did not venture to make in the course of three centuries.

It is also urged that Darius could not have been a Zoroastrian, because he makes no certain allusion to some important Zoroastrian doctrines, and undoubtedly upheld the practice of burying the dead. But, as the inscriptions of Darius are not specially religious, it is merely a matter of opinion how far they might be expected to mention such doctrines, although it may be readily admitted that Darius had not adopted the ceremonial laws of the Vendîdâd. Singularly enough, Zarathushtra himself, who was a teacher of religion, makes no allusion to any similar laws in his Gâthas, the only contemporary record of his opinions; so that we have no real reason for supposing that he objected to the burial of the dead, because when the Vendîdâd states that "Ahura Mazda spake unto Spitama Zarathushtra," or that "Zarathushtra asked Ahura Mazda," it merely expresses the pious belief of some much later writer who thus uses phrases that were still employed by Pâzand writers in post-Sasanian times. As we have already found some slight reason for supposing that the complete name Ahura Mazda originated in the Gâthas, we may perhaps assume that Darius professed some form of Gâthic Mazda-worship, more or less modified during the long interval that separated him from Zarathushtra's time, but still free from most of the additions and innovations long since introduced, in some districts, by the writers of the later Avesta.

Regarding the probability of the monotheism of Mazda-worship having been suggested by the monotheism of the Samaritan Israelites, we have to consider, not only the idolatrous character of the Samaritans, so forcibly portrayed in the Hebrew Scriptures, but also the extreme difference in disposition between the Jehovah of the Israelites and the

Ahura Mazda of the Iranians; this, however, is a study best made by each individual for himself. These remarks may perhaps be sufficient to warn the reader that the epoch of Zarathushtra is quite as uncertain now as it was two thousand years ago.

E. W. WEST.

JOURNAL

OF

THE ROYAL ASIATIC SOCIETY.

ART. IX.—*Chinese Antiquity.* By HERBERT J. ALLEN,
M.R.A.S.

THE question of the antiquity of the Chinese nation has long exercised the minds of Sinologists, and various are the conclusions arrived at by them on the subject.

Professor Lacouperie has pointed out that the Chinese are offshoots of the Accadian stock. This I am quite ready to admit; but I cannot agree with him in thinking that the early Chinese Emperors can be identified with Babylonian Kings about 2000 years B.C. There are no ancient monuments, inscribed sarcophagi and stones, or contemporary records of other nations, to which, as in the case of some of the ancient people of the world, we can refer in proof of this excessive antiquity; so we are compelled to criticize carefully the evidence handed down to us in the shape of the old Chinese classics.

At the outset of our inquiry we are confronted with the alleged historical fact, that by order of the Emperor Shi Hwangti, in the year B.C. 213, all the old books, with the exception of works on medicine, divination, and agriculture, and "excepting further the copies of works in the keeping of the Board of Great Scholars," were burnt; although Dr. Legge says (Shooking, proleg. p. 15) "those must have shared the common fate, for if they had not done so, the

Shoo would not have been far to seek when the rule of the Ts'in dynasty came in so short a time to an end."

Dr. Schlegel, indeed, says (*Uranographie Chinoise*, p. 743) that "the absence of historical documents is merely a negative proof against the antiquity of the Chinese race, because, in consequence of the burning of the books by the first Emperor of the Ts'in dynasty, many historical documents perished," but (p. 749) "we have in the Shooking, of which the authenticity is admitted now by the most incredulous in point of chronology, indirect proofs for the antiquity of the Chinese race." He bases his main arguments on their astronomy, from which he believes that of the Chaldeans, Egyptians, and other nations was derived. He says, "We are forced to admit 19,000 years for the antiquity of Chinese astronomy," but he comes to the conclusion that we must "allow a gap of 11,819 years between the third and fourth astronomical divisions prior to the age of Fuh hi (B.C. 2852), in which there are no geological or astronomical documents, and concerning which interval we can say nothing" (pp. 730, 769). Under these circumstances then, we need not stay to refute his arguments.

Mr. Giles, on the other hand, remarks that "the extent of the mischief done by this 'burning of the books' has been greatly exaggerated. Still the mere attempt at such a holocaust gave a fine chance to the scholars of the later Han dynasty, who seem to have enjoyed nothing so much as forging, if not the whole, at any rate portions of the works of ancient authors" (see his *Introduction to Chwang-tz*).

I hope to be able to show from an account of the manner in which the classics were discovered, and from an investigation of the names in the chronology, which can be identified in many instances with those of constellations, people, places, and events current at the time that the historian wrote, that the whole of these ancient classics were probably forged then, namely, about the close of the second century B.C.

The earliest history of China, on which subsequent dynastic histories have been modelled, viz. the Shiki, compiled by Sz-ma T'sien from materials collected by his

father, purports to give a history of the Empire from the reign of the Yellow Emperor, B.C. 2697 to B.C. 100 or thereabouts, there being an introductory chapter by a later hand going back to Fuh-hi, B.C. 2852, according to Mayers' chronology. This history was not published until the reign of the Emperor Sūan-ti (B.C. 73 to 48), when we are told that the text of the ancient classics was edited.

In the first three chapters, *i.e.* to the close of the Shang dynasty (B.C. 1150), long extracts from the Shangshoo, as the 'Book of History' was then called, notably from the portions called the canon of Yao, canon of Shun, tribute of Yü, and counsels of Kuo-yao, are quoted nearly word for word.

What then was this Book of History? K'ung An-kwoh, to whom we are indebted for the text of the book, is our earliest authority for the statement that it was compiled by his ancestor, Confucius, from documents in his possession. K'ung An-kwoh was a contemporary of the historian Sz-ma T'sien, and it must be told how the book fell into his hands 400 years after it was written.

I will quote from the history of the Former Han, written in the first century A.D., "At the close of the Emperor Wu-ti's reign (lasting from B.C. 140 to 86), as Kung, Prince of Lu, wished to enlarge his palace, he began to pull down the wall of Confucius' house, when he obtained the ancient text of the Shangshoo, the 'Book of Rites,' the 'Discourses,' and the Filial Piety classic, in all several tens of chapters. Having entered the house, he heard the sounds of harps, bells, lutes, and musical stones, so, being greatly alarmed, he stopped the work of destruction. K'ung An-kwoh afterwards obtained the volumes, and presented them to the Emperor; but as the sorcery affair occurred at that time (B.C. 91), they were not included in the works of the Imperial Library."

There is some difficulty in determining the date of this Prince of Lu, for in the 51st chapter of the history of the Former Han, the incident mentioned above is stated to have taken place at the very beginning of his rule, which lasted from B.C. 154 to 127, when he died.

Again, in K'ung An-kwoh's Preface to the 'Family Sayings of Confucius,' we read: "K'ung An-kwoh, when young, read poetry with Shen Kung, and received the Shangshoo from Fu-sheng. Later in life he made a thorough investigation of the classics and records, seeking information from many teachers. At forty years of age he became a censor, and was promoted to be a professor. After the T'ien han period (B.C. 100-97), as the Prince Kung of Lu was pulling down Confucius' old house, he removed from its walls the books of poetry and history. These came also into possession of K'ung An-kwoh, who studied the old *by the aid of the modern text*, and compiled works explanatory of the views of various teachers, called 'the Commentary on the Old Text of the Discourses in eleven volumes, the Filial Piety classics in two volumes, and the Shangshoo in fifty-eight volumes.' These were the books written in tadpole characters, which were found in the wall. K'ung An-kwoh collected and copied out Confucius' family sayings in forty-four volumes as well. After their completion the sorcery affair occurred, and they were not published. From professor he rose to be prefect of Linhwai, and was in office six years, after which he retired on account of ill health, and died in his own house at the age of sixty. The Emperor Ch'eng ti (B.C. 32-6) subsequently directed Liu hiang to revise the books, and they were copied out afresh."

The 'sorcery affair' refers to some wooden images, which were found among the effects of the heir-apparent, and which were stated to have put the Emperor's life in danger. So the Taoist priests, who were supposed to be at the bottom of the trouble, fell into disfavour at court, and were shortly afterwards dismissed as impostors.

Now as to the mode in which the 'modern text' (which was employed to interpret the meaning of the old text) was discovered, also curiously enough in a hole in a wall, the historical account is as follows: "Fusheng, professor of literature in the time of the Ts'in dynasty, when the order for the burning of the books was issued, hid the tablets of the copy which he had in a wall.

"During the hostilities which ensued he became a fugitive, but when the rule of Han was established he went to look for his books. Very many were lost, but he recovered twenty-nine volumes. Forthwith he began to give lessons from these books to the scholars of the Ts'i and Lu states, who became tolerably proficient, and eventually there was not a tutor in Shantung province of any standing who was not able to explain the Shangshoo. He taught Changsheng and Ou-yang Sheng, and the latter instructed Ni-kwan.

"During the reign of Wen ti (179-156 B.C.) the Emperor, after ineffectual attempts to find some one able to reproduce the Shangshoo, heard at length of Fu sheng, and summoned him to court. He was then over ninety years of age and unable to travel, so the director of sacrifices, Tchao ts'o, being ordered to take the matter in hand, went and secured the books.

"It is added that as Fusheng could not speak plainly, his daughter had to interpret for him; but the Ts'i dialect was so different from that of An hwui, that Tchao ts'o, not being acquainted with it, had to guess at the meaning of two or three tenths of the words, and make up the whole as best he could."

Again, quoting from the history of the Early Han dynasty (Ou-yang Sheng's biography, chap. 88), we are informed that the Emperor Wu ti (B.C. 140-86) "thought the book of history was a common sort of work, and did not pay much regard to it, but after listening to Nikwan's explanation of one of the chapters, he declared that it was worthy of examination."

It is strange that a work, of which Confucius was the reputed author, should have been so coolly spoken of, but on the one hand the great sage had not at that time been treated with proper honours, and on the other, as Dr. Legge observes (*Ch. Class.* vol. iii. proleg. p. 6), "the evidence which we have for his authorship is by no means conclusive."

As to the incident of the mysterious music at the time that the ancient text was discovered, Dr. Legge says (vol. i. proleg. p. 13): "This, which may appear to some minds

to throw suspicion on the whole account, might have been contrived by the Kung family to preserve the house, or it may have been devised by the historian to glorify the sage, but we may not on account of it discredit the finding of the ancient copies of the books."

It is curious, however, that Sz-ma T'sien does not even mention the incident in his *Shi-ki*, although it is stated that he "followed K'ung An-kwo's statements, and having questioned him with reference to the *Shangshoo*, inserted in his records the chapters called Canon of Yao, Tribute of Yü, Great Plan, Viscount of Wei-tz and Metal-bound coffer, all of which were written in the ancient character."

With regard to the doubts thrown by Chinese scholars at different periods on the authenticity of the books, Dr. Legge cannot help admitting that "perhaps K'ung An-kwo did polish somewhat in his transcription of his tadpole tablets. In making them out he was in the first place obliged to make use of Fuh-sang's books. . . . When he came, however, to new books, which were not in Fuh-sang, the case was different. His aids had ceased. He had to make out the text for himself as he best could. I (Dr. L.) can conceive that when he had managed to read the greater portion of a paragraph, and yet there were some stubborn characters which defied him, he completed it with characters of his own" (iii. proleg. p. 42).

The statement in K'ung An-kwo's biography is that he "read the old text of the *Shangshoo* by the aid of the modern characters and thereby brought his family into distinction," but nowhere is it explained how he managed in the first instance to read the tadpole tablets.

It may be suspected that K'ung An-kwo, who obtained possession of the ancient and modern texts, contrived these wonderful stories in order to bring himself and his family "into distinction," but to say that both texts were hidden away in walls by different persons when the Ts'in Emperor issued his decree that they should be burnt, betrays a want of originality on the part of the arch-forger.

It is stated that both the *Lun yü*, or Discourses of

Confucius, and the Spring and Autumn classic were found in the wall of the sage's house when it was being pulled down. The latter is the only work of which the *making* has been claimed for Confucius, and as to which he is supposed to have said, "It is the Spring and Autumn which will make men know me, and it is the Spring and Autumn which will make men condemn me."

Such a remark seems absurd when the work is examined, for without the commentary it is valueless. "Each chapter consists of a number of short paragraphs, embodying as many facts, concerning which the reader is left to draw his own conclusions. Facts are notoriously suppressed and misrepresented. But notwithstanding this, so great is the faith of the Chinese in Confucius, that it is enshrined among the classics, and has not even yet ceased to excite the admiration of his countrymen" (Douglas's China, p. 368).

Tso's commentary, from which Sz-ma T'sien quotes largely, is the earliest and far the most important of the three commentaries on the classic, which made their appearance early in the Han dynasty. It is not easy to say who the author was, but he could hardly have been a contemporary of the sage. Interpolations must have been made in the work by the Han scholars, especially in two classes of passages, viz. :

(1) The moralizings which conclude some narratives and are interjected in others, and which have nothing to do with the subject of the narratives. All these passages Lin-leuh of the Sung dynasty and other scholars attribute to Liu-hin; and (2) the predictions of the future, which turn out to be true, or allusions to such predictions, particularly those relating to the close of the Tchou dynasty. These were no doubt fabricated during the time of the first Han dynasty. (see Legge's Classics, vol. v. proleg. p. 35). After K'ung An-kwo and Sz-ma T'sien we must consider Liu hiang and his son Liu hin the next principal forgers of history.

Quoting from Liu hin's biography, we read, "Liu hiang (head of the literary commission for the editing of the classics) was by command of the Emperor Süanti (B.C. 72—

47) entrusted with Ku-liang's commentary on the 'Spring and Autumn' classic, and after some ten years' work, became quite conversant with it.

"When Liu hin, his son, took up the work of editing the obscure books, he saw the ancient text of the 'Spring and Autumn' classic, and of Tso's commentary thereon, and became fond of them.

"Yin hien, the chief minister's secretary at that time, undertook to explain Tso's book, and was associated with Liu hin in the task of editing the classic and the commentary. Hin agreed with him in some details, but also sought to learn the correct meaning by application to the Minister, Ti Fang-chin.

"Before this, because of the many ancient characters and sayings in Tso's commentary, students had contented themselves with simply explaining their meaning; but when Hin took it in hand, he quoted the words of the commentary to explain the text, and made them throw light on each other, and from this time the *proper meaning of the paragraphs and clauses was fixed*.

"He tried to get the Emperor Ai (B.C. 5—A.D. 1) to give Tso's 'Spring and Autumn,' Mao's Odes, the obscure Book of Rites, and the old text of the Shangshoo, places in the imperial Library; but they were rejected by the Board of Great Scholars" (Hist. Former Han, 36).

It appears that in the following reign the advocates of Tso's commentary were successful for a time, but it was not till A.D. 99 that its footing in the College was finally established.

As to the credibility of the old records, the gist of a long investigation by Dr. Legge (Chin. Class. i. pp. 53, 80, 89) is that "the accounts of the Emperors Yao and Shun are evidently legendary, that Yü the Great (a.c. 2205–2197) was the first historical ruler of China, but that nearly all that the book of history relates of his labours is fantastical exaggeration; that from the beginning of the Shang dynasty (B.C. 1766) we seem to tread the field of history with a somewhat confident step; but that the earliest date which can be

determined with certainty, is that of an eclipse of the sun, B.C. 775."

Father Premare, who had access to the Imperial Libraries of China about 200 years ago, is more reasonable in his dates. He says (Lett. Édif. xix. 457) that according to the Chinese histories, we must distinguish between the evidently fabulous age preceding Fuh-hi and later accounts; that the doubtful and uncertain period, to which we should pay no attention, is from Fuh-hi to Wei-lieh-wang (B.C. 2852-425); and that finally the sure and certain period is posterior to this date.

Amidst these conflicting statements we should study the names of our ancient Emperors, etc., and the legends connected with them, so that we can form a definite opinion as to the probable time when the chronology was invented. I shall refer principally to Sz-ma T'sien's historical records, but a few details from the Lushih of Lopi will also be given.

"Fuh-hi, also called T'ai hao (great brilliant), Pao-hi, and Mi-hi, Emperor of Spring, lord of the azure sky, king of heaven and year, belonged to the Fung family, ruled under the element Wood, which was in the East, and made use of the dragon symbol in naming his officers.

"His mother, Hwa-sū, having conceived by placing her foot in the footprint of a giant, gave birth to the god in the country of the nine barbarians after a gestation of twelve years. Brought up at Ch'eng Ki [Tsinchow, Kansu prov. Playfair's Towns, 1126], he became king when he was twelve years old.

"He had four teeth or projections, the body of a serpent, and the head of a man. A supernatural dragon-horse having come out of the River Lo presented him with a mystic scroll. He was the first to draw the eight diagrams, and used written documents, thus superseding the use of knotted cords. He also made the thirty-five stringed lute."

The name Fuh-hi may be identical with that of the Akkadian divinity Mulge or Hubisega, the Assyrian Bel Merodach or Marduk, and the Peruvian god Apachic, a

personification, in fact, of the "great brilliant" planet Jupiter, called the year-star, on account of the twelve-year period required for its revolution round the sun.

The gestation of twelve years, and his becoming king twelve years after birth, may equally refer to this astronomical fact. The four projections would then be Jupiter's four moons. As spring was the first season, so the first Emperor would naturally be called Emperor of Spring. Azure, wood, and east, all correspond with each other.

Fung, or Pong, is the name of a dominant aboriginal tribe south of the Yellow River.

The mention of the dragon-horse coming out of the river shows that this bit of mythology was forged after the year B.C. 113, because we read in the Han history that in that year a "horse came out of the U-wa water, and the poem of the celestial horse was composed." It is also recorded that a horse had come out of the Yu-wu water in the year B.C. 121. Yu-wu, or U-wa, was the name of a lake, also called Kara-omo, west of the town of Ansi, in Kansu province. A strange-looking horse, history relates, was found in the neighbourhood of the lake, and presented to the Emperor Wu-ti, of the Han dynasty, who was persuaded that there was something supernatural about it. It was called the "celestial horse" because it came from the vicinity of the Celestial Mountains.

The name of this lake probably supplied the name of Hwa-sū, Fuh-hi's mother, as well as that of Fuh-hi's successor Nü-wa, who is reported to have "fused coloured stones to repair the heavens after the pillar of heaven had been broken, in consequence of an individual named Kung-Kung having butted against the incomplete hill, and brought it down." I cannot conceive what originated this legend, but the expression (T'ienchu) 'pillar of heaven' was a name for India, and so the story would have been written after the Chinese became acquainted with India.

The records relate that "the wife of Shau-tien, being with child by a sacred dragon (Shen lung), gave birth to Shen nung (B.C. 2737), who was born with a man's body and ox's

head, and being designated Yen ti (fiery god) or Chi ti (red god), ruled under the influence of fire."

Now among the Phœnicians, Assyrians, and Persians we have traditions of men with bulls' heads, and the legend may have come from the west to China. "Red land" was an old name for Siam, but the fiery, or "red god," is probably a personification of the planet Mars.

The same Shen nung may be traced to the Nung-aboriginal tribes of Yunnan province and Assam, or more probably to the scholar Ch'en nung, who was commissioned to search for undiscovered books B.C. 31-6 (see Legge's Classics, vol. i. proleg. p. 4), and if the latter, the legends about Shen nung must have been invented about this date. I will refer to "Shau-tien" later on.

Then we read that "Hwangti (yellow god, or Emperor) was so called from the colour of the earth, the element under which he reigned. He was the son of Shan-tien, had the family name Kung-sun, the pre-name Hien-yuen, and another name, Yu-hiung, because he came from the Hiung country. His empire extended eastward to the hill of Wan (King chowfu, Lin Kū district, Shantung province) and T'ai tsung (Po ch'eng district); westward to K'ung t'ung (a peak of the Poling range, in Pinliang, Kansu province) and Cock's head hill; southward to the Great River and Hiung Siang [Ch'angsha, Hunan prov.; Playfair's Cities, 327]; northward to the Hiun yū tribe and the treaty-making-cauldron hill. He had his capital on the slope of Cho-lu" [near Pao-an, Chili prov.; Playfair, 5536].

Now "yellow god" was a name for Saturn, and Hwang ti may be a personification of this planet. Hwang was also the name of a Mon-Taic tribe in the south-west of China.

Hien-yuen is the name for a constellation of seventeen stars, viz. A 2232, $\rho, \sigma, \alpha, \eta, \gamma, \xi, \mu, \epsilon, \lambda, \kappa, \phi$, ix^b, 145 Piazz, and 6 Hevel (in Leo major), 11, 8, and 10 (in Leo minor). The constellation Hien-yuen (wheeled vehicle) is supposed to be so called from the Chinese chain-pump (Schlegel, Uran. Chin. 452).

The name Yu-hiung or Yu-seung occurs repeatedly in

ancient Chinese history. When Wen wang was imprisoned at Yu li by Tchow-sin, the last Emperor of the Shang dynasty (1150 B.C.), there was offered for his ransom "a beautiful woman from the Yu-sin country, parti-coloured horses from the Li-jung tribes, nine teams of horses from the Yu-hiung country and other strange things."

In the history of the Ts'u state it is related that "Ki-lien (said to be the Hiung-nu word for heaven, Wylie) had a grandson named Hiue-hiung, whose descendants being of little account, resided some in the Middle Kingdom, and some among the Man-yi (Southern barbarians) In the time of King Wen of Chow one of Ki-lien's descendants named Yu-hiung served King Wen and died before him. Yu-hiung's great-grandson was appointed to reside among the Man barbarians of the state of Ts'u at Tanyang, and bear the surname Mih, his sons being also granted land." Most of the Kings of Ts'u after him bore the title Hiung.

In the history of the Hiung-nu (in the Shiki) we find that the tribe was named Jung of the Mountains, Sien yün and Seun yü. The latter expressions with the characters reversed may have suggested 'Yu-hiung.'

The Jung tribes of Eastern Thibet were connected with the Burmo-Naga tribes (Lacouperie, *Lang. of China*, 151). Now the Annamite annals show us that eighteen Kings named Hung (Mand. Hiung) ruled in Southern China and Indo-China until 257 B.C. The first of them divided his Kingdom of Vênlang into fifteen provinces, one of which was called Chaüdiên (now the district of Sontay). This word probably gave birth to the name Shau-tien above, stated to be father of the Emperors Shen-nung and Hwang-ti, while Fuh-hi we saw was reported to be born in the country of the nine barbarians.

Annam and Southern China were conquered and divided into nine departments in B.C. 111, so this would again go to show that the traditions about Fuh-hi, Shen-nung and Hwang-ti were fabricated about this date.

The Records go on to say, "Hwang-ti had two sons, Seuén-biao or Ching-yang who lived near the Kiang water, and

Chang-yi who lived near the Jo water. Chang-yi married a woman of Sze-tehuen, who bore a son, Kaoyang or Chuen-sü, who succeeded Hwang-ti (B.C. 2513), and was himself succeeded by the Emperor Ku or Kao-sin (B.C. 2435). The Emperor Ku married, firstly, a daughter of Ch'en fung, who bore the Emperor Yao of T'ao-t'ang (B.C. 2356) and secondly a daughter of Kū-tze, who bore Chi (reigned B.C. 2365)."

Now on this I have to observe that Seu-en-hiao is the name for the constellation Sū, or according to our astronomy the two stars α Equulei, and β Aquarii (Schlegel, 219).

Chang-yi is the district forming the prefectural city of Kanchow, Kansu province (Playfair's Cities, 231). In the year B.C. 121 the Chinese general Ho-kū-ping, after carrying off a Buddhist gilt idol, "attacked an encampment of Hiung-nu tribes at the Kilien range, killing and capturing more than 30,000 men." The commentator remarks that Kilien was also called 'Heavenly' and 'White' Mountain, and was on the confines of Chang-yi (=perhaps Tengri, heavenly) and Tsiuchuen [Suchow, Kansu province, Playfair's Cities, 6681]. The news of this victory probably gave the historian the name Chang-yi for one of his characters.

Chuen-sü, or Chuen yü, is an old name for the town of Mungyin, Shantung province (Playfair's Cities, 4859). Ku and Kao are names of aboriginal tribes, Kao-yang meaning south of the Kao. Ch'enfung, Tao, and T'ang are all names of places or tribes.

The Yao tribes are still found in South-West China. In the Shan hai King (or Hill and Sea Classic) we find that the Chow jao or Chiao-yao "wore caps, and lived to the east of the men with three heads." They seem to have been dark pigmies or negritos. The historian had doubtless heard of them.

Kütze is the name of the constellation Pi, or γ Pegasi and Andromedæ (Schlegel, 304). Chi is also the name of a constellation consisting of four stars, viz. α^h . 171, ξ^h . 19 Piazzi, 234 and 283 (Bode) in the Great Bear (Schlegel, 531).

The Records say that the Emperor Shun, who succeeded

Yao B.C. 2255, was the son of Kusow, but K'ūsow, Siehieh and the Western Jung are mentioned as names of tribes against whom Shun fought.

After Shun we come to the great Yü, the first Emperor of the Hia dynasty (B.C. 2205), also called Po yü and Hia-how.

Now Po yü is a variant of Po yi or Pa yi, the name of an aboriginal tribe in Yunnan province. There are numbers of characters in ancient history bearing the name.

Hia how is the name of a celebrated scholar of the Han dynasty circa B.C. 100; and it may here be noted that Yü Kung (translated Tribute of Yü), the name of one of the chapters of the book of history, if reversed, forms Kung yü, the name of another scholar of that time.

There are hardly any records about the Emperors of the Hia dynasty after the great Yü, but it is curious that many of their names are those of stars; and it is further remarkable that a cyclical character forms part of the names of each of the Shang Emperors except the first. There are very few particulars recorded about the Hia and Shang Emperors from 2197 to 1150 B.C., although the records are fairly prolific in detail before their time.

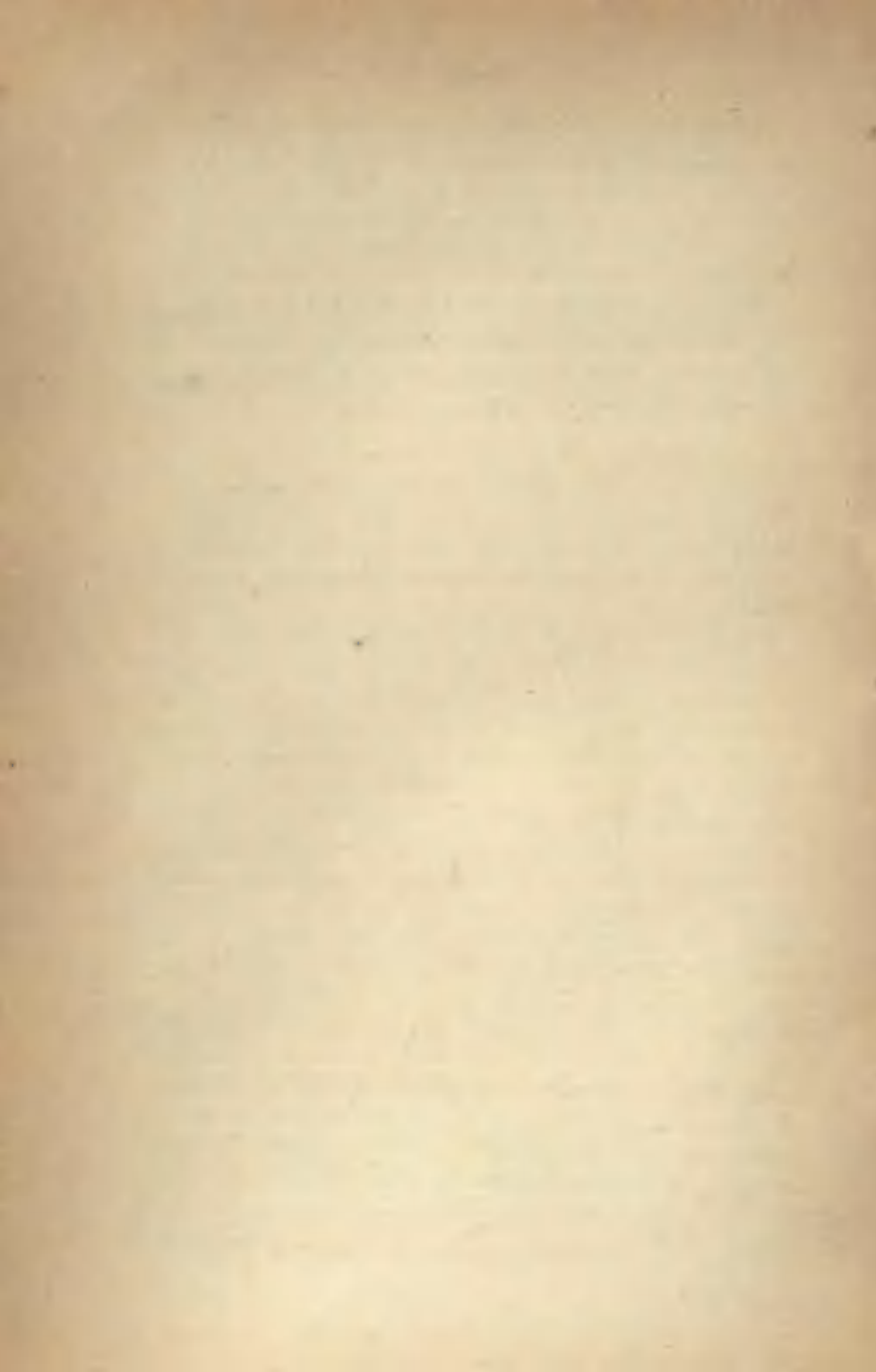
The Emperors being named from stars and constellations is a suspicious circumstance when we remember that the calendar was reformed in the year B.C. 104 by the historian Sz-ma T'sien just before he wrote his history, as tending to show what influenced his choice of names.

One may suppose that the historian's inventive faculty was deficient when we find that the first ancestor of each of the Shang and the Ts'in dynasties was born in consequence of a woman having swallowed an egg dropped by a dark bird. The story reminds one too of the legendary origin of the Manchus.

There is more repetition in the Records, for the conception of Prince Grain, the ancestor of the Chow dynasty, is identical with that of the Emperor Fuh-hi, viz. from his mother having trodden in the footprint of a giant. One cannot help wondering whether the historian had ever heard of Buddha's footprints in India.

Details of events in the early part of the Chow dynasty, B.C. 1150-775, are also scanty compared with those supposed to have occurred a thousand years before, and with the exception of the Tso-tchuen, mentioned above, we have no records for the latter half of the dynasty until we come to the Records of Sz-ma T'sien.

The subject might be pursued further, but I trust that I have said enough to cause those who base their arguments on the antiquity of the Chinese as a nation, to be more guarded in their observations.



ART. X. — *Notes on the Early History of Modern India.*

Part V. *On the Succession of the Hindu Priesthood, the Bhrigus, Añgiras, and Athareans, and the Historical Evidence thence derived, followed by the History of the Year.* By J. F. HEWITT, Esq., M.R.A.S.

I CLOSED the Appendix to the last Essay of this series, published in April, 1890, by adducing proof that Māghada and Bhārata were derived from the roots Mag and Bhṛi, both of which mean "to bring forth," and that they both meant "the sons of the great mother who brings forth all mankind."

But there is another name of a tribe in which the root Bhṛi appears, which seems to me to prove conclusively that Bhārata in its original form was not an Aryan word, but one formed according to Dravidian rules, and that the tribe so called must originally have been of Dravidian race. In the hymns telling of the war of the ten kings, Vashishtha describes how the Ṛtsus drove the weak Bhāratas before them like oxen,¹ but in his great song of triumph celebrating the victory of Sudas, he does not name the Bhāratas among the tribes opposed to the Ṛtsus. But among these tribes he names the Bhrigus as following the Turvaṣu and Matsya across the river to attack the Aryans.² In this word Bhṛi-gu the root "bhṛi," from which Bhārata is derived, appears in its naked form. This is not usual in Aryan words derived from verbal roots, nor is "gu" a usual ending of Aryan nouns formed from such roots. But in Tamil "gu" is one of the commonest suffixes added to verbal roots to form nouns,³ and Bhṛi-gu is therefore a noun regularly formed according to Tamil rules from the root "bhṛi." This root

¹ Rg. vii. 33. 1-6.

² Rg. vii. 18. 6.

³ Caldwell, *Comparative Grammar of Dravidian Languages*, p. 468.

"bhṛi" appears in modern Tamil in the roots "poṛu" to bear,¹ and "peṛu" to bring forth;² and the name would thus signify "the bringer forth," or, as the name of a tribe, the sons of The Mother, which must be, like Magha, the mother earth. The form Bhrigu, which is thus shown to be rich in historical instruction, must be a fossil word surviving from the time when the people of Northern India were trying to assimilate the Northern roots³ and forms of speech of their Assyrian teachers with those of a Dravidian people, and this earlier form was, as Aryan influence increased, altered into Bharga. It was the Bhargas who are named in the Mahābhārata as having been conquered by Bhima.⁴ Finally, the "g" of the original ending was dropped, and the people became known as Bhārata. But the original name still lingered in the sacrificial ritual, the repository of the oldest traditions, and we thus find the wise Bhrigus spoken of in the Rigveda as the finders and creators of Agni.⁵ In the Satapatha Brāhmaṇa they are named with the Aṅgiras as two tribes of priests.⁶ The Aṅgiras are also named in the ritual of the Soma sacrifice as the priests who used to perform the Soma sacrifice before the Adityas, or sun-worshippers, and it is said that when they offered the sacrifice for the new comers, the sons of Saro (speech), who worshipped "Vāch" speech as well as the sun, they received from them a white horse as a sacrificial fee.⁷ In the numerous versions of the story of the release of the cows, or the gods of light, from the prison where they were kept by the trading Papis, the worshipper of the gods of darkness, whether they are said to be released by Indra, Agni, and Sarama,⁸ by Sarama alone,⁹ or by Brihaspati,¹⁰ they are always spoken of as in charge of

¹ *It.* p. 473.

² *It.* p. 496.

³ The root "bhṛi" is so widely disseminated among Aryan nations that it must, if originally Dravidian, have been adapted at a very early time. Its Dravidian form would, as Penka shows, have been unaspirated, as *ber* or *per*, Penka, *Origines Ariæ*, chap. vi. p. 158, where he shows that the *tannes* preceded the aspirates.

⁴ Sabha (Digvijaya) Parva, xxi. p. 85.

⁵ *Rg.* x. 46. 2 and 9.

⁶ *Sat. Brāh.* i. 2. 1. 13, vol. xii p. 38, note 1.

⁷ *Sat. Brāh.* iii. 13-19, vol. xxvi. pp. 113-115.

⁸ *Rg.* v. 45. 6-11.

⁹ *Rg.* x. 108. 8 and 10.

¹⁰ *Rg.* x. 67. 1-7.

the Aṅgiras, and it was the offerings and songs of the Aṅgiras which helped Indra to free the cows.¹ It was they who by their sanctity attained immortality, and it was in the realms of the immortals that they learnt the order of the months.² These citations, to which others might be added, prove that they were the priests of the old gods and of the tribes who learnt how to measure time and arranged the course of the lunar year. But they were not the priests of the earliest ritualists, and in the Mahābhārata we find Uṣana, who is called also Sukra, and Bhargava represented as the Daitya priest of the Asuras or Danavas. He is the father of Devayani, the goddess-mother, the wife of Yayāti, the son of Nahusha, who bore to him Yadu and Turvasu. He is also the god Indra, or Sukra, for he says, "It is I who pour down rain for the good of creatures, and who nourish the annual plants which sustain all living things."³ Now Bhargava, which is one of the names by which Indra is here called, is exactly equivalent to Maghavat, and both mean the son of the Great Mother, and the Bhrigus or Bhargavas were her sons and priests, and were the ancient bards who are called in the Rigveda the poets who formed Agni,⁴ and who were the first thinkers who believed in a common mother for all mankind. They were first of the three lines of priests who successively framed the Hindu ritual, and were succeeded by the Aṅgiras, who again were succeeded by the Atharvans, or fire-priests, the sons of Atri, while the Bhrigus are always spoken of as the wise men of old, whose memory is almost lost in the mists of half-forgotten tradition. There are very definite statements made in the Rigveda, Brāhmaṇas, and the Laws of Manu as to the position and tenets of the Aṅgiras. They were the priests of the old gods of darkness, who retained the gods of light in bondage till they were released by Sarama, the mythological prototype of Atri of the Rigveda, or Ātar of the Zendavesta,⁵ who was the Adar of the Assyrians, the god of glowing fire.

¹ Rg. iii. 31. 11.

² Rg. iii. 31. 9.

³ Ādi (Sambhava) Parva, lxxx. p. 245. See the whole legend, Ādi (Sambhava) Parva, lxxvi.-lxxxiii. pp. 232-255.

⁴ Rg. i. 127. 7, x. 46. 2.

⁵ Darmesteter's Zendavesta, Strōzah i. 9, Sacred Books of the East, vol. xliii. pp. 7-8.

In Rigveda i. 83. 4 and 5, we find it stated that "the Aṅgiras first began the (sacred) task as they kindled the fire with zeal and pious works. They thus united with themselves (made their own) all the possessions of the Paṇis (traders), both men and herds rich in cattle and horses." But "the Atharvans first made the road by offering, and then was the beautiful sun born as protector of light." The connection of the Aṅgiras or priests of the old gods with the Paṇis or trading races is still further illustrated in the Satapātha Brāhmaṇa, in the concluding ceremonies prescribed for the new and full moon sacrifices. It will be recollected that in the directions for kindling the fire on the altar for these sacrifices, the sacred fire was ordered to be inclosed in a triangle formed of the "paridhis" or sacred sticks representing the gods of the early triad. The two sticks forming the angle pointing eastward represented the universal father and mother, while the middle stick, or the west side, represented the productive power animating them both. When the sacrifice is concluded, the priest is ordered to throw these inclosing sticks into the fire. "The middle inclosing stick he throws first with the text (*Vajasaneya Saṁhita*, II. 17a), 'The stick which thou laidst around thee, O divine Agni, when thou wert concealed by the Paṇis, I bring thee for thy pleasure; may it not prove faithless to thee!' With the text (*ib. b*), 'Approach ye the place beloved of Agni,' he throws the two others after it."¹ Thus the gods of the Paṇis, whose priests the Aṅgiras were, are made one with their successor and conqueror the fire-god, whose ministers were the Atharvans of the Rigveda, the Ātharvans or fire-priests of the Zendavesta.²

But the best and clearest statement of the succession of the fire-priests to the Aṅgiras is that derived from the account in the Aitareya Brāhmaṇa of the services of the sixth day of the Dvādāśaha sacrifice and the story of Nābhānedishṭha connected with it. Nābhānedishṭha, which

¹ *Sat. Brāh.* i. 8. 3. 22, *Sacred Books of the East*, vol. xii. p. 245.

² Darmesteter's *Zendavesta*, Introduction, iii. 15, *Sacred Books of the East*, vol. iv. p. 1.

means nearest to the navel (*nabha*),¹ was a son of Manu (the thinker), who was deprived of his share in the family property by his brethren. When he asked them for it, they told him to go to their father. When his father heard his complaint, he said to him, "Your brethren are the Aṅgirasah, who are holding their sacrificial session which is to take them to heaven, but they are puzzled as to what ceremonies are necessary on the sixth day. You tell them to recite Rg. x. 61 and 62, and they will then go to heaven and give you the thousand due to you. When by this recitation they became aware of the heaven-world and went to heaven, they left him the thousand, but it was at once claimed by Rudra, the phallic god, but Rudra gave it back to Nābhānedishṭha, who said he had received it from the Aṅgirasah, when he acknowledged that it was Rudra to whom it had first belonged, that is to say, that the vital creative power was first ascribed to Rudra."²

What is proved in this story is that the Aṅgirasah were the priests of the earth-born deities, and that it was by the help of Nābhānedishṭha that they learnt that it is in heaven that the real creative power resides, and that, as the imparters of this knowledge, Nābhānedishṭha took the place among the gods which had previously been assigned to Rudra the earthly father.

But in order to understand the story perfectly, it must first be shown who Nābhānedishṭha is. Of the two hymns named in the myth, the first, Rg. x. 61, is called the Nābhānedishṭha hymn. It tells of the union or marriage of heaven (*Prajapati*) and earth (his daughter). From this union the seed of all life, called Nābhānedishṭha, is born. In the eighteenth and nineteenth stanzas of this hymn, which are translated as follows by Haug, Nābhānedishṭha defines his mission and his power:

"v. 18. His relative the wealthy Nābhānedishṭha, who, directing his thoughts towards thee, speaks on looking forward [*Grassmann translates "in heaven"*] (as follows):

¹ This means the fire-god. See *Ait. Brāh. i. 5. 23*, Haug's translation, vol. ii. p. 62, where the Hotar is ordered to address the sacred fire on the altar in the words of Rg. iii. 29. 4, "We place thee, O Jātavedas (*Agni*), in the place of *Idā*, in the centre (*nābhī*, i.e. navel), on the earth to carry up our offerings.

² *Ait. Brāh. v. 2. 14*, Haug's translation, vol. ii. pp. 341-42. Rudra is named as the claimant of Nābhānedishṭha's share in *Tait. Sañ. iii. 1. 9. 4-6*.

'This our navel (that is, heaven) is the highest, as often as required I was behind him (the Nābhānedishṭha on earth).

"v. 19. This is my navel, here is what resides with me; these gods are mine, I am everything.'"¹

The next hymn, Rg. x. 62, is addressed to the Aūgiras, who are asked in the refrain of the first four verses to "receive the son of Manu." But the son of Manu in this hymn is not Nābhānedishṭha, but is said in the Aitareya Brāhmaṇa to be Narāsaṃsa, who is said to be the son born from the seed Nābhānedishṭha,² who is endowed with the faculty of speech. It was this Narāsaṃsa who was shown, in the account of the seasonal sacrifices in Part IV., to be, jointly with Tanūnapūt, the self-created one, the representative of the vital creative power, which, in the symbol of the old triad, bound heaven and earth together,³ and formed the middle stick of the sacred triangle.

But it is in the Zendavesta that the whole series of ideas connected with Nābhānedishṭha or the vital power "nearest to the navel" and Narāsaṃsa is most clearly explained. In the Zendavesta⁴ we find in the Vendidad the word "Nabnazdiṣtanam," which is the Zend form of the plural of Nābhānedishṭha, used to denote the lineal descendants (who are nearest to the navel) of an offender, and the word is also used as an epithet of the Fravashis, or holy mothers, in Yasna i. 18, and Fravardin Yast, 156, in the meaning of next-of-kin.⁵ But it is as the angel Nairyā-sangha, the Zend form of Narāsaṃsa, the Yazad or god of royal lineage, that the Zoroastrian Nābhānedishṭha assumes a personal form and appears as the guardian of all seeds, and the fountain of all life. It is he who guarded the seed of Zarathustra from whence the three prophets of the future, Hūshēdar, Māb, and Sōshyans, are to spring, and committed it to the care of Anāhid, who is the "Ardvī Sūra Anāhita" of the Ābān Yašt, the

¹ Ait. Brāh., Hang's translation, Introduction, vol. i. p. 24.

² Ait. Brāh. vi. 5. 27, Hang's translation, vol. ii. p. 424.

³ Part IV. J.R.A.S. April, 1890, pp. 339-343.

⁴ Darmesteter's Zendavesta, Farg. iv. 11. 5-10, Sacred Books of the East, vol. iv. pp. 36-37.

⁵ Mill's Yasna, i. 28, Sacred Books of the East, vol. xxxi. p. 231; Darmesteter's Zendavesta, Fravardin Yast, Sacred Books of the East, vol. xxxiii. p. 230.

goddess of the fertilizing waters.¹ In the *Sirōzahs* he is described as the "god Nairyō-Sangha who dwells in the navel of kings."²

But his exact position in the sacred hierarchy and the historical succession represented by the five days' sacrifice of the *Añgirasah* and the advent of *Nābhānedishtha* is best shown in the lists of the sacred fires given in the *Yasnas* and *Bundahiṣ*. In the *Yasna* list the sacred fires are named as follows.³ 1. The fire *Berezi-savangha* of lofty use before *Ahura Mazda* and kings. 2. The fire *Vohu-Fryāna* (animal heat of men and beasts). 3. The fire *Ur-vāzišta* (the fire of life in plants). 4. The fire *Vāzišta* (the lightning). 5. The fire *Speništa* (the most bountiful, that used in the world). 6. The fire *Nairya-sangha*, the *Yazad* of royal lineage (that used in temples). 7. The household fire.

Of these seven sacred fires the first five appear in the *Bundahiṣ* in the same order as in the *Yasna*,⁴ and there the first fire, *Berezi-Savang*, is explained to be the fire in the earth and mountains, or, in other words, the vital power in the mother-earth. The word *Savangha* or *Savang* is the same which appears in the name of *Savangha-vāch*, one of the wives of the great snake *Aži-Dahāka*, who afterwards married *Thraētaona*, the *Zend Indra*, who slew the great snake.⁵ It would appear to be connected with the Eastern region called in the *Bundahiṣ* *Savah*, over which the holy star *Tiṣtrya*, who brings the waters, presides, and which lies east of the sacred central land called *Khvanīras* in the *Bundahiṣ*, and *Hvārizm*, *Khvārizm* and *İvaniratha* in the *Zendavesta*.⁶ This would appear to be the country known as *Sogdiana*, through which the *Oxus* flows, and which lies

¹ Darmesteter's *Zendavesta*, *Fravardin Yašt*, 62, *Sacred Books of the East*, vol. xxiii. p. 195, note 2; West's *Bundahiṣ*, xxiii. 8, *Sacred Books of the East*, vol. v. p. 144.

² Darmesteter's *Zendavesta*, *Sirōzah*, i. 9, *Sacred Books of the East*, vol. xxiii. p. 8.

³ Mill's *Yasnas*, xvii. *Sacred Books of the East*, vol. xxiii. p. 258.

⁴ West's *Bundahiṣ*, xvii. 1-4, *Sacred Books of the East*, vol. v. pp. 61-62.

⁵ Darmesteter's *Zendavesta*, *Aban Yašt*, 33-34, *Sacred Books of the East*, vol. xxiii. pp. 61-62.

⁶ West's *Bundahiṣ*, xi. 1-3; Darmesteter's *Zendavesta*, *Mithra Yašt*, xiv. and xv., *Sacred Books of the East*, vol. v. p. 33, vol. xxiii. p. 123.

east of Khorasan, the modern name of Khvārizm, the central land of the Zend tribal confederacy.

It was in this country that the sacred mountain Ushidarena, the home of Zamyād, the spirit of the mother-earth, and the hallowed symbol of the pregnant mother, was situated.¹ And from this it would appear that the worship of the mother-earth originated in the East, and it was thence that the ancient Magi, or priests of the divine mother Magha, whose name is preserved in Margiana, the ancient name of the western part of Sogdiana, first made their way to the Persian Gulf as the Akkadian Highlanders, and thence as the Maghas to India.

But while Berezi-Savangha means the mother-earth, it is in the name of the second fire, Vohu-Fryāna, that we find the idea of generation as the especial function of the gods, which underlies the myth of Nābbānedishtha, most clearly expressed. This name must refer to the tribe called Fryāna, named in the Gātha Uštāvaiti as the Turanian tribe who "shall further on the settlements of piety with zeal," that is, act as the intimate allies of the Mazdeans.² But this word cannot be the actual Turanian name of this tribe, as the Turanian languages do not use aspirated labials, and the nearest sound to *f* they possess is the semi-vowel *v*. In a Turanian language the nearest sound to the Zend *Fry* would be *Viru*, and *Viru-an* would be the god *Viru*. This, as we have already seen in the account of the Hindu *Virātā*,³ means masculine energy, and is the distinctive title of the phallic god. This *Viru* turned into the Aryan *Fry* points to *Fria*, the moon-god of the Scandinavians and Old High Germans,⁴ and in both these languages the moon is masculine.⁵ This word would also seem to be connected with the Norse *Frió*, *fræ*, Swedish and Danish *frö* 'seed,'⁶ and *Fryāno*

¹ West's *Bundahis*, xii. 15, *Sacred Books of the East*, vol. v. pp. 37-38.

² Mill's *Yasnas*, *Yasna* xlv. 12, *Sacred Books of the East*, vol. xxi. p. 141.

³ Part IV. J.B.A.S. April, 1890, pp. 402-404.

⁴ See Max Müller's *Essay on False Analogies in Comparative Theology*, Introduction to the Science of Religion, p. 313, where *Frya-dag*, or *Fri-day*, is shown to be sacred to the moon both in Norse and Old High German.

⁵ Mallet's *Northern Antiquities*, Bohn's edition, p. 465, note.

⁶ *J.B. Glossary to Prose Edda*, s.v. *Freyr*, p. 651.

or Virasno would thus mean the seed-sower, and this coincides with the translation of Vohu-Fryāno given by West in the *Bundahis*, who interprets it as the fire of the good diffuser within the bodies of men.¹ Thus Vohu-Fryāno would mean the phallic god, the universal father.

We now come to the third fire, Ur-Vazišta. Here Vazišta is evidently the same word as the Sanskrit Vashishtha, who was one of the two fire-sticks, while his wife Arundhati² was the second, in which the fire was kindled by the friction of the first stick, and Ur-Vazišta means the ancient form of the vital energy which made the original pair capable of production before this power was ascribed to the divine heat. This power was, as I have shown, represented as Androgynous or Hermaphrodite.³

The fourth fire, Vazišta, was the male form of the fire-stick represented in later mythology when the gods were looked for in heaven as the lightning, while the fifth fire Speništa (the most bountiful), is the female member of the pair.

Thus these five fires represent first the ancient triad of the father, mother, and creative and productive force, while the last two of the group represent what was originally the earliest form of worship of the creative energy, that of the universal father and mother, who became in later theology the pair of fire-sticks, the Swastika.

We now come to the sixth fire, Nairya-sangha, Nābhūnedishtha, or Narūṣaṁsa. This is the sacred fire of the temples, the Vāhrām fire, which is represented in the *Bundahis* as the Frōbak fire established by Yima on Gadman-hōmand (the glorious mountain) in Khvārizm, Khorasan.⁴ This is the fire of the kings in their character as priests.⁵ It is the continual and perpetual worship of the sacred fire as

¹ West's *Bundahis*, xvii. *Sacred Books of the East*, vol. v. p. 61, note 3.

² *Mahābhārata*, Adī (Chaitra-ratha) Parva, clixvi. p. 500. Arasī means the fire-stick.

³ Part IV. J.R.A.S. April, 1890, p. 361.

⁴ West's *Bundahis*, xvii. 5, *Sacred Books of the East*, vol. v. p. 63; Mill's *Yasnas*, Yasna xvii. *Sacred Books of the East*, p. 258, note 7.

⁵ Darmesteter's *Zendavesta*, *Sīrōzah* i. 9, *Sacred Books of the East*, vol. xliii. p. 7, note 2; also p. 294, note 2.

the highest form of the creative power which is represented by the addition to the ritual made by Nābhānedishtha, who thus became the first of the Athārvans, or fire-priests, while the Aṅgirasah were clearly the priests of the older race of worshippers of the sacred pair and the triad.

But there is still another myth, that of the sacrifice of Śunahṣepa, the story of which is told both in the Rigveda and the Aitareya Brāhmaṇa, which illustrates very clearly the historical position occupied by the Aṅgirasah.

Śunahṣepa was the son of Ajigarta of the race of the Aṅgirasah. King Harischandra of the Ikshvāku race had obtained from Varuṇa (the heaven of night)¹ a son called Rohita, whom he had promised to sacrifice to the god. He delayed fulfilling his promise on various pretexts, and finally allowed him to go and wander in the forests. Varuṇa then afflicted Harischandra with dropsy, and Rohita, having wandered six years in the forest by the advice of Indra, who hinted to him that by so doing he might save his father, met Ajigarta the Rishi, who was starving. Rohita wanted to take one of Ajigarta's three sons, Śunahpuccha, Śunahṣepa, or Śunolangula, to be sacrificed to Varuṇa as his ransom, and offered to give him one hundred cows as his price. The father refused the eldest of the three, and the mother the youngest; but they allowed him to take the middle son. Rohita then took Śunahṣepa to his father, and presented him to Varuṇa, who accepted the sacrifice. On the day appointed Visvāmitra was Hotar, the Zastar of the Zoroastrians, the priest who addressed the gods. Jamadagni, or the pair of fire-sticks, the Adhvaryu, or offering priest, the Zend Rathviskar,² while Vasishtha was the Brahmā or later addition to the priesthood. When it was necessary to bind Śunahṣepa to the sacrificial post, Ajigarta offered to do it for another hundred cows; and he was bound, as we are told in the Rigveda, to three "drupadas" or sacrificial posts,³ that is

¹ Rg. i. 24. 9, where the stars are said to show Varuṇa at night.

² Haug's Ait. Brāh. vol. i. Introduction, p. 18; Darmesteter's Zenda-vesta, Fargard, v. 57-58, Sacred Books of the East, vol. iv. pp. 63-64, show these to be the original names of the priests called by Haug Zota and Rathwi.

³ Rg. i. 24. 13. See also Rg. iv. 32. 23, where the marriage post is called drupada. As the sacrificial post was phallic (see Part IV. J.R.A.S. April,

to say, he was to be sacrificed to the triad of which Varuṇa was the chief god. When Ajigarta offered for another hundred cows to kill his son and complete the sacrifice, Śunaḥṣepa called on Prajāpati, who sent him to Agni. He then went to Savitar, the sun (but this is evidently a later addition of the sun-worshippers, like that of Ushas further on), who sent him to Varuṇa. Varuṇa referred him back again to Agni, who promised to release him if he praised the Viṣve Devah or gods of the country. They said Indra was the most powerful god, and Indra told him to praise the Aśvins or heavenly twins, and they finally released him on his praising Ushas. The verses he recited are all taken from the group of hymns, Rg. i. 24 to 30, which are dedicated to Śunaḥṣepa, and evidently written to preserve the legend.

When Śunaḥṣepa was freed, Harischandra recovered. Ajigarta then asked that his son might be restored to him; but Visvāmitra refused, and adopted him as the eldest of his hundred sons,¹ though he was an Aṅgirasah.

In this story we see that the Aṅgirasah were the priests of the old gods to whom human sacrifices were offered, and that these offerings were made before the sacrifices were burnt with fire; but when the ritual prescribed the tying of the victim by the neck to the sacrificial post, and then killing it by stabbing it in such a way that the blood spurted over the phallic sacrificial post, and vitalized it, as well as the earth in which it was fixed. The story evidently marks the period when human sacrifices ceased, according to the ritual of the Kūṣikas, at least; for Visvāmitra was the prince of the

1890, p. 377, note 4, and p. 378), it was, according to this passage, the phallus that the bride and bridegroom used to walk round seven times as they now go round the sacred mango-tree. This reference to Drupada also throws light on the story of the Mahābhārata. The king of the Panchālas was Drupada, but his son Dhrishtādyumna and his daughter Drūpadī, or Krishnā, were not begotten naturally, but were born from the sacrificial flame by the prayers of Yaja, an impure Brahmin. Adi (Chitra-ratha) Parva, clix. pp. 479-483. This miraculous birth represented the change in the sacrifice made when the victim was burnt instead of being fastened to the sacrificial post (drupada) by the neck, and stabbed, so that the blood vitalized both the phallic post and the earth, and also foreshadowed a new era, as Drūpadī became the bride of the Pāṇḍavas, the saviours of the new epoch, and Dhrishtādyumna, their generalissimo in their great war against the Kauravyas. See Part IV, J.R.A.S. April, 1890, pp. 425-438.

¹ Ait. Brāh. Haug's translation, vii. 3. 13-18, vol. ii. pp. 460-471.

Kuṣikas, and was also the moon-god, as I have shown in speaking of his Zend counterpart Mithra.¹ It was the Kuṣikas who introduced the full lunar year, and it was this race of handicraftsmen who brought in fire-worship, and with whom also the Aṣvins, or heavenly twins, were especially connected.² It will be seen in the story of Śunaḥṣepa that Agni and the Aṣvins were the principal agents in his release, and it was the people who first introduced into the ritual these mythological conceptions who completed the computation of time by months, which is ascribed in the *Rigveda* to the Aṅgirassah,³ by adding two to the sacred period of eleven months dedicated to the gods of generation by their special priests, who were the predecessors of the Atharvans, or fire-priests. But this change in the ritual did not cause the elimination of the Aṅgiras, who were retained in an honoured place with their predecessors the Bṛhigus, and they became also the priests of the moon-god Visvāmitra, and are described in the *Rigveda* as among his most zealous followers. Thus in Rg. iii. 53. 7, "The generous Aṅgiras and Virūpas (worshippers of the bi-formed, bi-sexual, god), sons of heaven, men of the Asuras," are said by "giving treasures to Visvāmitra, to have wished to lengthen his days."

But there is another line of descent by which we can gauge the historical sequence of the Aṅgiras. One of the titles of Uṣana, or Sukra, the great Bṛigu priest of the Daityas or mother-worshippers, and of the Dānavas or Asuras, the snake and phallus-worshippers of the Mahābhārata, is Kāvya, meaning the son or of the race of Kavi.⁴ Kavi is in the Laws of Manu said to be the son of Angiras,⁵ and Kāvya is one of the seven Rishis included in the Great Bear, the Hapto-iringas of the Zendavesta.⁶ Furthermore, the Kavi kings are a most important dynasty in the fragments of history

¹ Part IV. J.R.A.S. April, 1890, p. 366, note 2.

² Part IV. J.R.A.S. April, 1890, pp. 407-410, where I have shown that the Aṣvins probably represent the two months added to the sacred eleven by the Kuṣikas to make the full lunar year of thirteen months.

³ Rg. iii. 51. 9, "It is the Angirasah who attained the order of the months."

⁴ Mahābhārata, Adi (Sambhava) Parva, lxxvi. pp. 233, 236.

⁵ Bühler's Manu ii. 161, Sacred Books of the East, vol. xxv. p. 58.

⁶ Alberuni's India, Sachau's translation, vol. i. p. 394.

recorded in the *Zendavesta*. They ruled over the country described in the *Zamyād Yašt* as that "where lies Lake Kāsava" (the present Zarah or Hamun sea in Seistān, the Sogdiana of the Greeks), along with the *Haētumañt* river (the *Helmend*), where there stands Mount *Ushidhan* (*Ushidarena*).¹ This was the country now forming the west of Afghanistan, the ancient home of the *Kuṣikas*, or sons of *Kuṣ*. The kings of this dynasty as named in the *Zamyād* and *Fravardīn Yašts* are—1. *Kavi Kavāta*, 2. *Kavi Aipivōbu*, or *Aipivanghu*, and *Kavi Usadha*, or *Usadhan*. *Kavi Usadha*, who is the *Kai Kāūs*, or king of the *Kauṣikas* of the *Bundahiṣ*, had four sons, of whom I need now only notice *Syāvarshan*.² *Syāvarshan*, being exiled by his father, took refuge with the *Turanian Frangrasiyan*, who was king of *Tūrān* for two hundred years, and seems to have ruled in the country of the *Kavis*, for in the *Bundahiṣ* it is said that *Frāsiyāv* (*Frangrasyan*) brought a thousand springs into the sea *Kyānsih*, the lake *Kāsava* of the sons of *Kuṣ*, or *Kayans*, and to have brought the *Hētumañt*, or *Helmend*, into the same sea, into which it flows at the present day.³

But *Frangrasyan* seems also to have ruled India, and to represent the snake and phallus-worshippers there, for *Syāvakhshan* in his exile founded the fortress of the holy *Kangha* in *Kang-desh*, whither, according to the *Bahman Yašt*, he went from the good *Chakād-i-dāitik*, or the country of the mother river *Daitya*.⁴ Now *Kangdesh* is clearly India, and may possibly be the modern *Kandesh*, for it is described in the *Bundahiṣ* as lying "in the direction of the East, at many leagues from the bed of the wide-formed ocean towards that side."⁵ In the *Diwā-i Mainōg-i-khirad*, which, though a late work, is founded on old traditions, *Kang-desh* is said to "be intrusted with the Eastern quarter near to *Satavāyes*,

¹ Darmesteter's *Zendavesta*, *Zamyād Yašt*, x. 66; also *Introduction to Aśtād Yašt*, *Sacred Books of the East*, vol. xxiii. pp. 302 and 283, also p. 33, note 1.

² Darmesteter's *Zendavesta*, *Zamyād Yašt*, xi. 71; *Fravardīn Yašt*, 132, *Sacred Books of the East*, vol. xxiii. pp. 303, 222, also p. 64, note 1; West's *Bundahiṣ*, xxi. 25, *Sacred Books of the East*, vol. v. p. 136.

³ West's *Bundahiṣ*, xx. 34, *Sacred Books of the East*, vol. v. p. 82.

⁴ West's *Bahman Yašt*, iii. 25, *Sacred Books of the East*, vol. v. p. 226.

⁵ West's *Bundahiṣ*, xxix. 10; *Sacred Books of the East*, vol. v. pp. 119-120.

on the frontier of Airān Vējō.”¹ Now Satavanesa is, as I have shown, the southern constellation of Argo, which ruled the ocean to the south of the Persian Gulf, and the country lying immediately to the east of its influence would be Kandesh. The Bundahiṣ also states that there is a river in Kang-desh which is called Chatro-miyan, the river of Mokarstan.² Kang-desh is one of the countries outside the sacred region of Khanvīras. It is mentioned along with Saukavastān and others. Saukavastān is ruled by Gōpetshah. He is the same as Aghraērattha, the son of Pashang and brother of Frangrasiyan, who killed him. His name, which means the king (badshah) of the cows (Gōs), shows why he was called the semi or bull-man in the Gōs Yašt.³ The other outside countries named are Tāzikān, the plain of the Arabs, the plain of Pēšyānsai, the plain of Nāv tāk, Airan Vej, the inclosure formed by Yim, and Kashmir in India. In identifying these countries, there can be no doubt that Saukavastān is the country of the Sākas, the Sakastānē of the Greeks, and the Sakasthāna, or Sakadwipa, the place or island of the Sākas of the Hindus. It is Seistan Sogdiana, lying, as is said in the Bundahiṣ, on the way from Turkistān to Chinistān or China. It is the country of the Oxus.⁴ The country of the Arabs lies to the west. The plain of Pēšyānsai is Kabul.⁵ Airān-vēj is in Ātaro-pātukan.⁶ The inclosure formed by Yim is in the middle of Pars (Persia), answering to Khorasan. Now Kang-desh appears to be quite outside this country. It was there that Pēshyōtanu, the son of Vishtasp, ruled, and took his name, Chitrō-Maiṇō, from the Kang-desh river Chitro-Miyan.⁷ This name Chitrō-Maiṇō may be, as West suggests, derived from “mainyu” spirit, or “maunghō” the moon; and as I have shown that the name of the Indus

¹ West's translation, liii. 12-14, *Sacred Books of the East*, vol. xxiv. p. 109.

² West's *Bundahiṣ*, xi. 7 and 31, *Sacred Books of the East*, vol. v. pp. 77, 82. Mokarstān may mean the country of the Mughas, which must have been in ancient times, when the Mughas or mother-worshippers ruled India, the name of the country.

³ Darmesteter's *Zendavesta*, Gōs Yašt, 18 and 22, *Sacred Books of the East*, vol. xiii. pp. 114-115.

⁴ West's *Bundahiṣ*, xxi. 4, 5, and 13, *Sacred Books of the East*, vol. v. pp. 116, 117, 120.

⁵ *Ib.* p. 120; *Bundahiṣ*, xxix. 11.

⁶ *Ib.* xxix. 12.

⁷ *Ib.* xxix. 5, p. 117.

(Sindhu) was probably derived from Sin, the moon, it would appear that the last derivation is the most probable.¹ In short, this river "of the moon" appears to be either the Indus or, if the Kang-desh of the Zendavesta and Bundahiş is the same as the modern Kandesh, the Tapti. This river was anciently called the Payoshni river, and afterwards the Tapti, a name of the sun. It may have been originally the moon-river. This country of Kang-desh was conquered by Tusa, the son of Naotara (the new star, probably Tiştrya),² from the sons of Vācśaka, the Satavāesa, or the snake-worshippers of the Persian Gulf, and this conquest is probably another version of the invasion of the Northern Kuşikas which is commemorated in the conquest of Syāvakhshana and the tale of Pēshyōtanu, and it must have been this country which was conquered by Husrava, the son of Syāvarshan, when he avenged his father by killing Frangra-siyan.³ Whether the identification of Kang-desh with the modern Kandesh is tenable or not, one thing is certain, that the Kavi kings, the sons of Kuş, ruled the whole of Northern India, and established their capital at Kaşi (Benares), and that, according to Manu and the other proofs I have adduced here and elsewhere in this series of essays, they were the founders of the lunar year. Whether the kingdom of Anga, which was situated to the south of Māgadha, in the country now known as Bhagulpore, and which is mentioned in the Atharvaveda,⁴ takes its name from the Aṅgiras, or they from it, I cannot say; but the two countries, Māgadha, the country of the Maghas or Bhrigus, and Anga, are very close together, and the two tribes of Bhrigus and Aṅgiras are historically most closely connected together, and both were in intimate alliance and united in their ritual before the Kuşikas entered India.

But the country of Anga immediately adjoins, if it did not anciently form part of Vanga or Banga, the modern

¹ *Id.* xxix. p. 117, note 2.

² Darmesteter's *Zendavesta*, *Abn Yasht*, 53. 55.

³ Darmesteter's *Zendavesta*, *Sis Yasht*, v. 21. 22, *Sacred Books of the East*, xxiv. p. 115.

⁴ Part IV. *J.R.A.S.* April, 1890, p. 477; *Atharva-veda*, v. 22. 14.

Bengal. The union between Māgadha and Anga was not by any means indissoluble, for Bimbisāro, king of Māgadha, the contemporary of the Buddha, conquered Anga. Now Vanga bears a very strong resemblance to the name of Ashi Vanguhi, the Zend goddess, who, in the Zendavesta, is described as the patroness of married women,¹ to whom Husrava, the son of Syāvarhan and the conqueror of Frangrasyan, sacrificed. But this name Vanguhi also seems to have something to do with the Veh river, considering that all rivers were looked on as mothers and fathers from the days of the Indra-worshippers. This river, described in Bundahis as made up of the Arak (Araxes), Āmi (Oxus), the river of Misr Egypt, the Indus, and the Frāt or Euphrates,² appears to be the circular river which surrounded the sacred land of Iran. But when the sons of Iran came to the south-east, and settled on the Guṇḡa, it is possible that they would have been inclined to extend the boundary of their sacred land to its banks, and to call it also the Vanga or mother-country, after the name of their goddess Ashi Vanguhi, the goddess of the Vanga or circle of the Veh. It was almost certainly these northern immigrants who introduced the family life of the household and the household fire in place of the tribal life of the Turanian nations.

A great deal of this last dissertation is conjectural, but the conclusions at all events fit in with the historical proofs, and show, I would submit, with a very near approach to certainty, that in the successive lines of the priesthood, the Bhrigus are the priests of the mother-worshippers, the Aṅgiras of the snake and phallus-worshippers, and the Atharvans of the northern fire-worshippers, and that it was they who, as the sons of Kuṣ or the Kavi kings, conquered Northern India and substituted their rule for that of their Turanian predecessors, who, as is shown in the present instance by the account of the irrigation works of Frangras-

¹ Darmesteter's *Zendavesta*, Ashi Vagt, 41-43, 54, *Sacred Books of the East*, pp. 278 and 280.

² West's *Bundahis*, vii. 15-17. xxi. 7. 8. 9. 10, *Sacred Books of the East*, vol. v. pp. 29, 76, 77, note 4, and 78.

yan, were already a highly civilized people, and represented the Virātas and Kaurāvyas of the Mahābhārata.

In addition to the foregoing proofs connecting Anga with the Aṅgiras, and showing that the latter were accredited priests of the Kuṣikas of Kāśī who also ruled Anga, I must point out that the Mahābhārata proves that two of the principal opponents of Krishna, or Vishṇu, and the Pāṇḍavas were Karṇa the charioteer, or Kuṣika king of Anga, and Vāsudeva king of the adjoining Vanga or Bengal, if indeed the two were not the same country. Karṇa was the miraculously born son of Prithā (Prithivī), the mother-earth, who was also the mother of the three elder Pāṇḍavas. His father was the Sun, and his mother, on his birth in the Kuntibhoja capital, on the river Aśva, placed him in a basket and committed him to that river. He was thence floated down the Charmanvati (Chambal), the Jumna, and the Ganges, till he reached Champa, the capital of Anga. He was then saved by Radhā, the wife of Adiratha, the chief of the charioteers or Kuṣikas.¹ He was made king of Anga by the Kaurāvyas, and was their most conspicuous military leader in the great war with the Pāṇḍavas; but before that he had, in the interests of the Kaurāvyas, annexed to their rule a long list of kingdoms, recorded in the Mahābhārata as his conquests.² The religious opposition to the reform personified in Vishṇu as its chief god, is proved by the speech of Krishna, where he denounces Vāsudeva, king of Vanga, as "that wicked wretch among the Cheḍis who represents himself as a divine personage, who has become known as such, and who always bears from foolishness the signs which distinguish me, that king of Vanga, Pundra and the Kirātas, who is known upon earth by the name of Pandraka and Vāsudeva."³ This saying and the opposition of Karṇa, king of Anga, fully prove that the Eastern country was, long before the advent of the Vishṇu-ites, or religious reformers from the West, the seat of a powerful monarchy ruled by the Kuṣikas, and possessing a

¹ Ādi (Sambhava) Parva, cxi. pp. 330-331, Vana (Kandala-harana) Parva, cccv.-ccviii. pp. 901-907; J. R. A. S. April, 1889, p. 277.

² Vana (Ghoshā-harana) Parva, cclii.

³ Sabha (Rajasayarambha) Parva, xiv. p. 45.

strongly organized religious system, with a priesthood which must have included the Aṅgiras in its ranks. This religious organization must have been based on the sacrificial ritual which was upheld by the predecessors of the Vishnuite reform, and the Aṅgiras, as the old sacrificial priests, must have been powerful members of this Eastern hierarchy.¹

But it was these successive lines of priests, whose history I have tried to discuss, who first, in order to secure the due observance of the sacrifices at the proper times and seasons, undertook the task of measuring the sequence of time.

The History of the Year.—As the whole of the sacrificial system of all the ancient nations who adopted a fixed ritual rests upon the year, it is evident that the history of the year is of the greatest possible chronological and historical importance. For when it is understood, it becomes plain that the sequence of the sacrifices recorded in ritualistic manuals gives most valuable evidence as to the dates which are partly denoted by changes in the ritual. This we see in the seasonal sacrifices, where in one place five seasons are invoked, while in another there are only three seasonal festivals prescribed, and in other places six seasons are mentioned. It is only by learning the history of the year that changes such as these can be explained, and as the change to three seasons denotes, as I have shown, a racial and dynastic revolution, under which the rule of the Northern tribes worshipping the god of the sacred water, and of their allies the Sākas and Aryans, was substituted for that of their Dravidian predecessors, the explanation brings out most valuable historical information.

¹ Stanzas 15-19 of Rg. x. 27 give a noteworthy description of the successive orders of Aṅgiras, or sacrificial priests; v. 15 speaks of the seven men who came from the South (the priests of the pentad, the old phallic fire-god and Indra, god of the waters). They were joined by eight from the North (those who looked on eight as the symbol of the heavenly fire), while nine came from the West laden with coin (the Vishnuites, whose sacred number was nine), and ten from the East (the mother-worshippers of Eastern India, to whom the ten months of gestation were sacred). In v. 17 they are all said to have disputed as to whether the offering should be cooked or not—that is to say, whether it is to be a burnt offering or one in which the blood of the victim is to be poured on the ground. In v. 19 they are all said to disappear before the sun, who destroys the phallus worshippers (Sisna, the phallus, for Śisna deva, phallic gods). See Grassmann's *Rigveda*, vol. ii. p. 469.

The year was originally calculated for sacrificial purposes, and as the prosperity of the country was thought to depend upon the absolutely correct performance of sacrificial ceremonies at the times ordained for each rite, the preparation of the official calendar marking the dates of each separate festival and solemn sacrifice in the annual round of sacrificial observances must have been from the earliest times regarded as one of the most important duties of the priests. I have shown, in the account I have given of some of the principal sacrifices in the Hindu ritual, to what a remote period in the past the ritualistic system extends, and the history of the year must begin with the time when the first altar was consecrated, and the first victim sacrificed to celebrate the recurrence of one of the annual epochs of seasonal change.

In the later Hindu ritual, as we learn from the *Mahābhārata*, *Rigveda*, and *Brāhmaṇas*, the gods of time who ruled the sacrificial year were thought to be thirty-three in number. I have shown that there were certainly three recognized methods of distributing them over the sacrificial year. The first was that of the *Rigveda*, which divides the gods into three groups of eleven each. But this division is entirely based on the three Aryan seasons introduced by the *Sākas* and *Aryans*, and the eleven gods consecrated as the rulers of the period of generation, regarded as sacred by the *linga*-worshippers, who added one month, dedicated to the earthly father, to the ten months of the mother's year. Thus the work of generation required eleven gods, and these eleven begot the three seasons, which are the number recognized by some of the writers of the *Rigveda*, and which are still reckoned as the number of seasons in the Northern Punjab, where the *Vedas* were written.¹ In the *Brāhmaṇas* *Vashatkāra*, the god who makes the seasons, is reckoned among the thirty-three gods, and this proves that they must include the seasons; but, as the whole sacrificial system is based upon a year of five seasons, it is clear that the division of the thirty-three gods of time, which depends upon only

¹ Zimmer, *Altindisches Leben*, chap. xiii. p. 373.

three seasons, cannot be that which was contemplated by those who first fixed on the number thirty-three as representing the official year. The second mode of distribution was that of the Vishnu-worshippers, which can only be understood by explaining the third method, which is that recognized by the authors of the Brāhmaṇas. According to them the thirty-three gods were made up of eleven Rudras, eight Vasus, and twelve Adityas, to which were added Prajāpati, the son of Manu, and Vashatkāra, the god who makes the seasons. Now the twelve Adityas are admitted to be the twelve months of the solar year, of the eight Vasus seven represent the seven sacred days of the week, the Amesha Spenta of the Zendavesta, and the eighth Vasu I have proved to be the god Dyū, called Bhishma in the Mahābhārata, and who is the son of Visvāmitra of Vedic tradition, the old moon-god, son of Gādhi, the father of the Kaśyapas or Kuśikas; the eleven Rudras were the eleven sacred months of generation. When dealing with this subject before,¹ I attempted to explain this division by pleading that it was based on Brahmin ignorance of the methods and intentions of their predecessors. I now see that the explanation is totally wrong, and that this division of the gods of time is really a complete synopsis of the previous methods of calculating time, and a new and wonderful proof of the great learning and eclectic toleration of the Brahmin ritualists. Thus the Rudras are the eleven sacred months of generation, and these, with Prajāpati and Vashatkāra, make the full lunar year of thirteen months, which was the year of the Turanian or Dravidian people, who were the descendants of Manu the thinker, who was also the father of Prajāpati. Vashatkāra, which means the god who makes the Vashat call, is the god of the linga, the Rudra who was summoned to the sacrifice by the cry Svāhu, which is named as the Vashat call, and means that he is asked to bear it to the gods. In this arrangement the sacred eleven months of generation are placed first as the oldest ritualistic division, and the whole sacrificial year is concluded by the two months

¹ J.R.A.S. April, 1889, pp. 302-306, and 318-324.

which were, as will be shown later on, added to the eleven by the Takshakas or sons of Kasyapa, to make up the full year of thirteen months. Within these two inclosing limits, which represented the complete lunar sacrificial year, were placed the divisions of time sacred to the Northern immigrants and the Semite Akkadian sun-worshippers. These are the seven sacred days of the week, the eighth day sacred to the sun-god, added in the Zoroastrian calendar to the last two weeks of the month, to make thirty days instead of twenty-eight in the month, and the twelve months of the solar year.

What the exact division made by the Vishnu-worshippers was I have found no evidence to show, beyond the fact that they only reckoned nine Rudras, and it is useless to conjecture how the other numbers on the list were allotted. But at any rate none of these methods of distributing the thirty-three gods can be looked on as that which was originally made.

That this number thirty-three was held to be sacred from very ancient times is proved by its persistent use, both in the Hindu sacred writings and in the *Zendavesta*,¹ and as it is based upon the seasons of the year, it must have originally included the number recognized in the original sacrificial ritual. This was, as I have conclusively shown, five, and therefore the remaining twenty-eight must mean twenty-eight sacred divisions of time, and these must be the twenty-eight days of the lunar month, and the original year must have consisted of months of twenty-eight days each, and have been divided into five seasons. But in the explanation in the *Mahābhārata*, which originally led me to look on the *Nakshatras* as among the thirty-three gods, the *Nakshatras* or wives of *Soma* are said to be only twenty-seven, and to make up thirty-three I showed, on the authority of the *Aitareya*

¹ Müller, *Gāthas and Yasnas*, *Yasna* i. 10, *Sacred Books of the East*, vol. xxxi. p. 198, and many other places. A passage quoted by Max Müller, *Preface* to vol. iv. of the *Rigveda*, p. 53, from the *Taittiriya Saṁhita*, ii. 3. 5. 1, in which the daughters of *Prajāpati* are said to be thirty-three in number, gives undoubted proof of the antiquity of the sanctity attached to the number, as *Prajāpati* is the chief of the old lunar gods.

Brāhmaṇa, that six seasons must be added,¹ as Vashatkāra, the last of the thirty-three gods, is there called the god who makes the six seasons. This is the number which is said in the Satapatha Brāhmaṇa to have been reckoned by the fathers, and was the number of ritu or seasons of two months reckoned in the solar year, and in the sacrificial year of the Jyotishah, which is the official year of the Brāhmaṇas.² Therefore the six seasons points to the use of a year later than that on which the sacrificial ritual was based.

But in the passage of the Mahābhārata where twenty-seven Nakshatra are mentioned, they are distinctly stated to be parts of the year, as "they are employed in indicating time," and therefore these twenty-seven Nakshatra must mean a year, and not the twenty-eight days of the month; and this Nakshatra year must have been specially adapted to the sacrificial annual cycle, and it is this year which is recorded in the official lists in the Taittiriya Brāhmaṇa. But these twenty-seven Nakshatra constituting the year form the lunar section of the cycle of five years formed to unite the lunar and solar years, and in this arrangement all the months except three are divided into two Nakshatra, each Nakshatra representing a phase of the moon. To each of the remaining three months three Nakshatra are allotted to make the lunar year of thirteen months correspond with the solar year of twelve, and even then there is one Nakshatra over. But this monthly allotment does not mean that there are ever three phases of the moon in any month, but the Nakshatras are in this cycle only nominal divisions, the real agreement between solar and lunar time being made by shortening the lunar day called "tithi." Thus in the five years' cycle 1860 lunar "tithis" are reckoned as equal to 1830 nakthemera or solar days of twenty-four hours each. It is quite clear that the twenty-seven Nakshatra used in a calendar thus formed could never have been originally calculated for this purpose, but that they must have come

¹ Aitareya Brāhmaṇa, iii. 6, Haug's translation, vol. ii. p. 177; see Part II. J.R.A.S. April, 1889, pp. 318-321.

² Max Müller, Preface to vol. iv. of edition to the Rigveda, pp. 34-35.

from some earlier arrangement. If their first use had been to describe the number of phases of the moon in the lunar year of thirteen months, they must have been twenty-six in number; but we never find twenty-six Nakshatra, and the number is always twenty-seven or twenty-eight. The twenty-seven Nakshatra are only found in connection with this sacrificial cycle, whereas the Arabians and Persians, who are, besides the Hindus, the only people who used Nakshatras, always reckoned twenty-eight,¹ and the Hindus themselves allowed that there was also an additional or twenty-eighth Nakshatra, which they called Abhijit.² But these twenty-eight Nakshatra could never have been used to represent the number of phases of the moon in the lunar or any other year, and the question is, which did they represent? In order to clear up all the difficulties arising from these conflicting numbers, it is necessary to consider the following questions.

1. What divisions of the year were originally represented by the Nakshatras, and what was their original number?

2. Did they first receive names as representing divisions of the year or of some smaller unit?

3. How was the original year reckoned, what number of months did it contain, and what was the number of days in the month of the first and subsequent collocations of months used to measure time exceeding one month?

4. When did the original year begin?

As these questions cannot be satisfactorily solved without the help of the *Zendavesta*, I wish to say a few words as to the historical value of the evidence thence deduced. The great object of Zarathustra and those who, under his name, expounded the Mazdean religion, was the promotion of righteousness. Religion was not in their eyes merely a debtor and creditor account between God and man, represented by sacrifices and offerings on one side and benefits paid on the other, nor was it a system of generating prosperity, wealth, children, flocks and

¹ Alberuni's *India*, Sachau's edition, chap. lvi. vol. ii. pp. 81-82.

² *Bundahis*, chap. ii. West's translation, *Sacred Books of the East*, vol. v. p. 11.

herds, by feeding with sacrifices the higher powers, whose duty it was to produce these benefits for their worshippers. The whole system of Mazdeism represents a phase of religious development much later than those shown in these crude conclusions. This change arose when a recorded moral law was looked on as a necessary supplement to the sacrificial law of debtor and creditor. From this time the observance of the law was looked on as the best sacrifice, and the account opened between God and man was one in which not the sacrifices offered, but the good deeds of those who obeyed the law were placed to their credit. In the religion of Zarathustra, which was in some points analogous to both those of the Jewish prophets and priests, what was required was that each of the servants of Ahura Mazda should dedicate their whole time to his service, and make their life a perpetual worship, in which the sacrifice that was offered was the life and powers of those who believed. In the Zoroastrian ritual little or no change was made in the modes of reckoning time, on which the previous sacrificial code of Irān had been based;¹ but instead of the sacrifices of horses, oxen, and lambs, which had been offered by the national heroes of the past,² Zarathustra prescribed a pure sacrifice of "Haoma (Soma) and meat, offered with the holy wood (for fire), the baresma (the sacred twig cut from a tree without thorns), the holy mortar (to crush the Haoma or Soma), the wisdom of the tongue, with the holy spells, with the speech, with the deeds, with the libations, and the rightly spoken words."³ These sacrifices were those instituted at the beginning of the last reform in the sacrificial ritual, when burnt offerings of slain animals were beginning to be discredited, and were being gradually replaced by the fruits of the earth, hallowed, like

¹ There was one change made as to the Gāhs, which, as I have shown, were formerly the five seasons, but under Zarathustra's reform became the five periods of the day, each devoted to its special religious exercises.

² See the sacrifices of Haoshyangs, Yimakhsheta, and other heroes, in the Abān Yast, each of whom offered a hundred stallions, a thousand oxen, and ten thousand lambs, Darmesteter's *Zendavesta*, *Sacred Books of the East*, vol. xxiii. pp. 52-58.

³ Vendidad, Fargard iii. 1, note 2, also Fargard xix. 18, and Abān Yast, xxi. 104; Darmesteter's *Zendavesta*, *Sacred Books of the East*, vol. iv. pp. 22 and 209, and vol. xxiii. p. 78.

the burnt offerings, by heat and fire. But it was not sacrifices which Zarathustra regarded as the truest and best holy offerings; what he insisted on was religious conduct, and the life-long devotion of true believers to the service of Ahura Mazda. To insure this, each day was divided into five periods called *Gāhs*, in each of which a separate form of belief must be recited. It also required the devotion of every day to some power representing a form of the Supreme Being. In the lists of these days, called *Sirōzahs*, the heavenly powers to whom each of the thirty days of the month were to be devoted are named. But besides this list of thirty heavenly powers, we find another in the earlier section of the *Zendavesta* called the *Yasna* or rules for sacrifice. In this there are thirty-three gods, who are called in the section beginning these rules, and in many other places throughout the ritual, "the thirty-three lords of the ritual order."¹ This list is followed by a statement that the sacrifices that are to be offered are the monthly offerings "to the month, lords of the ritual order, to the new moon and the later moon," and the yearly festival to the seasons.² Thus showing that the gods to be worshipped are the gods of time, the moon-god who makes the months, the *Prajāpati* of the *Brāhmanas*, and the year-god who makes the seasons, the Hindu *Vashatkāra*, who is, as I have shown, the god of the *linga*, the earthly father. These thirty-three gods must have been originally exactly the same as the thirty-three gods of the Hindu year, and both must represent the days of the lunar month and the seasons. Any other hypothesis than that they sprang from one common source is impossible, as no two nations so widely separated as the early moon-worshippers of *Irān* and the Southern Hindus could both have separately developed a reckoning of time based on thirty-three divisions. This method of reckoning time must have come from the same country as that from which the name of Ahura Mazda is derived. Ahura is, as Professor Darmesteter shows, merely

¹ Mills, translation of the *Yasnas*, *Yasna* i. 10, iv. 15, vi. 9, and many other places, *Sacred Books of the East*, vol. xxi. pp. 198, 216, 220.

² *Yasna* i. 8, 9, iv. 13, 14, vol. xxi. *Sacred Books of the East*, pp. 198, 216.

another form of Asura.¹ Asura is derived from the Akkadian Asari, the chief, and the Asuras were, as we know from the Hindu Brāhmaṇas, worshippers of the snake-gods headed by the great snake Nahusha, who came from the Euphrates valley. Further and almost conclusive evidence of the Euphratean origin of the Zoroastrian gods of time is given by the finding in the library of Assurbanipal of a list of the days of the month, with the gods to which each was dedicated. This is referred to by Prof. Darmesteter, on the authority of Prof. Halévy.² From these considerations it is clear that in the Zendavesta we find most valuable and trustworthy evidence as to the original Akkadian chronometry, from which that of the Hindus and of the ancient inhabitants of Irān was derived.

I will now proceed to consider the first question I have proposed for solution. *What divisions of the year were originally represented by the Nakshatra, and what was their original number?* The Hindu astronomers quoted by Max Müller, in the essay to which I have so often referred, namely, Kamalākara Bhaṭṭa, who gives Mādhava, an ancient astronomical writer, as his authority, and Garga, both tell us that the monthly passage of the moon through the heavens was regarded as a circle, that the Nakshatras were stages in that circle, and that a Nakshatra month consists of one passage of the moon through all the Nakshatras. Patanjali also says that the passage of the moon through each Nakshatra represents a Nākshatra Ahorātra (a Nakshatra day and night).³ Hence the number of days in a Nākshatra month, according to these authors, corresponds with the number of lunar days occupied by the monthly changes of the moon.

¹ Darmesteter's Zendavesta, Introduction to Vendidad, iv, 3, Sacred Books of the East, vol. iv, p. 58.

² Darmesteter's Zendavesta, Introduction to Sīrōzahs, Sacred Books of the East, vol. xxiii, p. 3, note 1. The Egyptians also, as Herodotus, ii, 82, tells us, consecrated each day in the month to some god. This must, like the rest of their early ritual and their original gods, be derived from the Euphrates valley. I have already, in Part III. J.R.A.S. July, 1889, pp. 540, 542, traced these triads to worshipped the mother earth, Horus, the earthly father or phallic god of the new moon, and Osiris or Thoth, the moon-god.

³ Max Müller, Preface to vol. iv. of the Rīgveda, pp. 55-58, and note to p. 58.

Alberuni explains very clearly how this Nākshatra month originated. He says that the early astronomers observed that the moon in completing her changes makes the circuit of the heavens, "beginning to be visible in the West," and ceasing "to be visible in the East." This is done in twenty-seven days and three-quarters,¹ or in round numbers in twenty-eight days. Hence the Arabians and early observers who, as Alberuni says, had only their eyes and numbers to rely upon as means of research, fixed the several stations for each day of the moon's journey according to the constellations and fixed stars, with which the moon stands in conjunction, or in the immediate neighbourhood of which she passes. Alberuni, moreover, points out that the stars used by the Arabians and Hindus do not agree, nor do the numbers of Nakshatras, as the Arabians have twenty-eight and the Hindus only twenty-seven. Now the reason why the Hindus have only twenty-seven Nakshatras is shown by Garga and Varāhamihira to arise from the attempt made by Hindu astronomers to combine the solar and lunar years in one measure of time, which they fixed as a cycle of five years.² In doing this they divided the Zodiac into twenty-seven equal parts of $13^{\circ} 20'$ each, to represent the lunar year, and they then dropped the twenty-eighth Nakshatra, which they had hitherto used as a division of the monthly circle.³ Consequently it was impossible for the stars and constellations, which represented the twenty-seven divisions of the Hindu five years' cycle, to correspond with those marking the twenty-eight divisions of the Arabian circle, which merely marked the lunar month.

But no examination of this question can be complete with-

¹ This is the computation given by Alberuni, Alberuni's *India*, Sachau's edition, chap. lvi. vol. ii. pp. 81, 82. The real computation is 27 dya. 7 hrs. 43 min.

² Max Müller, Preface to vol. iv. of edition of the *Rigveda*, p. 51; Varāhamihira, *Pañchasiddhantikā*, chap. ii. 7, p. 11 of translation, Thibaut's edition of 1859.

³ The Arabian astronomers, when they told Alberuni that the Hindus always left out one Nakshatra, because it was always covered by the rays of the sun, explained the absence of the twenty-eighth Nakshatra quite rightly, and not wrongly as he thought. What they meant was that the twenty-eighth Nakshatra would not fit in with their solar reckoning of time, Alberuni's *India*, Sachau's edition, chap. lvi. vol. ii. p. 82.

out considering the Chinese *Sieu*. There are twenty-eight single stars described by the great astronomer Biot as single stars near the equator, the intervals of which in time had been carefully observed, by noting in water clocks the instant when they passed the meridian. They refer to these the positions of other stars and planets coming to the meridian between them. These twenty-eight stars thus represented twenty-eight divisions of the heavens by which the motions of all the heavenly bodies, sun, moon, planets, and comets were determined, without being specially devoted to any one of them.¹ The positions of twenty-four of these stars had been determined, according to Biot, more than 2000 years before our era,² and the last four appear to have been added before or about 1100 B.C. These stars are all at different intervals, and hence the divisions of the circle are not, like those of the Hindu *Nakshatra*, equal. Prof. Whitney, who has carefully studied the subject, says that after the exhibition of the concordances existing among the three systems "of the Hindoos, Chinese, and Arabians, it can enter into the mind of no man to doubt that all have a common origin, and are but different forms of one and the same system."³ Now the original twenty-four stars of the Chinese have been supposed to have some connection with the twenty-four hours; but what is most pertinent to the present inquiry is that they, as well as the twenty-eight finally adopted, represent a circle in the heavens used for astronomical purposes; and the general use of the division of the sky into twenty-eight unequal parts, as among the Arabs, is one among the many proofs that one of the first astronomical divisions of time used was the lunar month of twenty-eight days. This was reckoned as a circle in the heavens, and the passage of time

¹ Max Müller, Preface to vol. iv. edition of *Rigveda*, pp. 39, 45 and note, 51, and 82.

² But these twenty-four stars were certainly Akkadian. They were the divine judges, twelve north and twelve south of the Zodiac, mentioned by Diodorus ii. 30, and in Akkadian documents (Sayce, *Hibbert Lectures* for 1887, p. 72, note) they were the twenty-four hours, but they must have been a later invention than the earlier division of time by watches, which is so universally found as the fundamental calculation of the intervals of light and darkness.

³ *Surya Siddhanta*, edited by Burgess and Whitney, p. 201, quoted by Max Müller, vol. iv. of edition of *Rigveda*, p. 45.

was computed by the distances of the stars, which were used as the mile-stones of each division.¹ The division of the heavens into twenty-four hours must have been much later than the original astronomical circle, as the ancient Akkadians, like the modern Hindus, used to reckon their time by watches. But the original system of the Hindus must, like that of the Arabs, have been taken from the early Akkadians, and the Hindus must have originally reckoned by junction-stars (*Yoga-tārās*), as they retain the term in their astronomical vocabulary, and were able to point out twenty to Alberuni which agreed with those used by the Arabs. The others they could not point out, as the use of the cycle had destroyed their old astronomy and converted the twenty-eight unequal divisions of the early computators into the twenty-seven equal divisions of the heavens. The earliest Persians also used the division of twenty-eight stars, as is shown in the list of the twenty-eight subdivisions of the heavenly circle in the *Bundahis*:² and that this was based on a division of the month into twenty-eight days is proved by an examination of the *Sirōzahs* and of the list of the days of the month, with the gods to which they were sacred, found in the bilingual Akkadian and Assyrian documents.

In the *Sirōzahs* the thirty days of the month are divided into four weeks—the first two of seven days and the last two of eight days each; but it is the first seven which are especially holy, and are called the *Amesha Spenta*, or *Ameshpendes*.³ If the list had been originally solar, the seven *Amesha Spenta* would, like the *Vasus*, who occupy the same position in the Hindu ritual, have been turned into eight. But instead of

¹ I have shown later on that this early circle was probably succeeded, when an attempt was made to calculate time by divisions of the circle, by one marked by ten stars. This was used for yearly calculations. The monthly circles only represented daily changes noted by the passage of the moon from one star or constellation to the next. They were afterwards increased to thirty, and were the thirty spheres of the Vedic hymn *Rg. x. 109. 3* above referred to. It was the circle of ten stars used for the purpose of the general measurement of the passage of time, which was the invention of the sons of Kux, and the instrument used by them in determining the lunar year.

² West's *Pehlavi Texts*, *Bundahis*, chap. ii. 2, *Sacred Books of the East*, vol. v. p. 11.

³ Darmesteter's *Zendavesta*, *Sirōzahs* i. 8, *Sacred Books of the East*, vol. xxiii. p. 6, note 11.

making the alteration as the Hindus did, the Zoroastrians retained the ancient seven days in the place of honour, and placed the weeks with eight days at the end of the month. That the list of the *Sirōzahs* was originally a stellar list, framed from astronomical observations on a lunar model, is rendered likely by the important position assigned to *Tīr* or *Tistrya*, the dog-star, which was the ruling star of the worshippers of *Arđvi Anāhītā*, the great water goddess, who was the ruling deity of the tenth day, thus recalling the tenth month of the mother's year, while *Tistrya* rules the thirteenth, as the seed of the waters which is the father of the offspring of the waters produced in the full lunar year of thirteen months.

The Assyro-Akkadian calendar also shows similar traces of having been founded on an original month of twenty-eight days, for the first three weeks of the month consist of seven days and the fourth of nine.

I will now proceed, before making further comments on these lists, to place those from the Assyrian tablets, the *Yasna* and *Sirōzahs*, side by side, for purposes of comparison.

I.	II.	III.
Assyrian list showing gods to which each day was sacred. ¹	<i>Yasna</i> list. ²	<i>Sirōzah</i> . ³
No. of day.	No. of day.	No. of day.
1. <i>Ann</i> and <i>Bel</i>	1. <i>Ahura Mazda</i>	1. <i>Ahura Mazda</i>
2. The two <i>Istars</i>	2. <i>Vohu manō</i> (The good mind)	2. <i>Bahman</i> , <i>Vohu-manō</i>
3. <i>Merodach</i> and <i>Zerpanit</i> (a fast day)	3. <i>Asha Vahišta</i> (Righteousness)	3. <i>Arđibehešt Asha Vahišta</i>
4. <i>Nebo</i> , son of <i>Merodach</i> , and <i>Tasnut</i> his wife	4. <i>Khshatra Vairya</i> (Sovereignty)	4. <i>Shahrēvar</i> <i>Khshatra Vairya</i> , Lord of Metals.
5. <i>Mul-lil</i> and <i>Nin-lil</i> (lord and lady of lower firmament)	5. <i>Ārmaiti</i> (Universal weal and immortality)	5. <i>Sapendārmad</i> , <i>Spenta Ārmaiti</i>

¹ Sayce, *Hibbert Lectures* for 1887, p. 70.

² Mills, *Yasna* i. 1-7, *Sacred Books of the East*, vol. xxii, pp. 195-198.

³ Darmasteter's *Zendavesta*, *Sirōzah* i. *Sacred Books of the East*, vol. xxiii, pp. 3-13.

I.	II.	III.
6. Rimmon and Nin-lil (Rimmon is the beneficent god of the seasons) ¹	6. Haurvitāt (the body of the kine)	6. Khordād, Haurvitāt (the seasons and the years)
7. Fast day to Merodach and Zerpanit (Sabbath)	7. Ameritāt (the kine's soul, the fire)	7. Murdād Ameritāt (flocks and herds)
8. Nebo	8. Aanya (the day lords)	8. Dui pa Ādar (the day before Ādar)
9. Ādar and Gula	9. Hāvani	9. Ādar Ātār (the glory of the Aryas)
10. Nin-lil (mistress of the lower firmament and the divine judge)	10. Sāvanghi (lord of cattle) ²	10. Ābān Ardvi Anāhitā (God of the Waters)
11. Tasmit and Zerpanit	11. Visya (lord of the Viṣ or people)	11. Korshēd (the well-horsed sun)
12. Bel and Beltis	12. Mithra (of the wide pastures)	12. Māh (that keeps in it the seed of the bull)
13. The Moon (the Supreme God)	13. The Yazad (god) of the spoken name	13. Tīr, Tistara, Sirius (leader of the Haptoirings (the great bear))
14. Beltis and Nergul (Sabbath)	14. Rāma Hvāstra	14. Gōs Drvāspa
15. Sin (the Moon God, lady of the house of heaven)	15. Rapithwina	15. Dur pa Mihir (the day before Mihir)
16. Merodach and Zerpanit	16. Fradatshu	16. Mihir Mithra Rāma Hvāstra
17. Nebo and Tasmit	17. Zantuma ³	17. Srōsh Sraosha
18. Sin (the moon goddess), Samas (the sun-god)	18. Uzāheirina	18. Rash, Rashnu Raxīsta Arstāt

¹ Sayce, Hibbert Lectures for 1887, p. 205.

² Mills, *Yasna* I. 3, *Sacred Books of the East*, vol. xxxi. p. 196, note 5.

³ Here, in *Yasna* i. 4, *Asha Vahišta*, *Righteousness*, and *Ameritāt*, *Ahura's* fire, Nos. 3 and 7, are again introduced; but these insertions have been made, as I shall show later on, to increase the original number of twenty-eight sacred days of the month to thirty.

I.	II.	III.
19. Gula (a sabbath)	19. Fradatvira	19. Fravardin Fravashis
20. Sin and Samas	20. Dahvyuma	20. Bahrām Vere-thragna
21. Sin and Samas (a sabbath)	21. Ahura Napāt Apām (son of the waters)	21. Rām, Rāma Hvāstra Vayu
22. Sin and Samas	22. Aivisrūthrima	22. Bād (the wind)
23. Samas and Rim-mon	23. Abigaya	23. Dai pa dīn
24. Lord and Mistress of the Palace	24. Zarathustrōtema	24. Dīn Chista (the law)
25. Bel and Beltis	25. Fravashis	25. Ard Ashi Van-guhi
26. Ea or Hea	26. Verethragna	26. Astād Arstād (that makes the world grow)
27. Nergul and Zikum (chaos)	27. The Victorious Ascendency	27. Āsmān (Heaven)
28. Ea or Hea (the day of resting of Nergal)	28. Ushahina	28. Zemyād (the earth)
29. Day of resting of the moon-god	29. Berejya	29. Mahraspand, Mathra Spenta (the holy word)
30. Anu and Bel	30. Nmānya	30. Anirun (the eternal luminous space)
	31. Srosha (obedience)	
	32. Rashnu Razista (the most just)	
	33. Arstāt (who advances the settlements)	

The first thing to be noticed in these lists is—what seems to go far towards proving that the Assyrian lists and that of the *Sīrōzah* both have come from a common origin—that the ninth day in both is sacred to Adar, who is, as I have

shown, the god of the fire-stick (*Svastika*), the Akkadian *Uras*, and the Greek *Ares*. In that case *Gula*, who is associated with *Adar*, is the second of the two sticks which, when rubbed together, produce the fire.

As to other points, as the list in the *Yasna* contains thirty-three gods, these ought to be the twenty-eight days of the month and the five seasons, but instead of the names of the seasons, as recorded in later lists, it mentions the names of the five *Gāhs*, 9. *Hāvani*, 15. *Rapithwina*, 18. *Uzāheirina*, 22. *Aivisrūthrima*, and 28. *Ushahina*. These *Gāhs* are also mentioned in the list of the *Sīrōzah* after No. 7. *Ameritāt*, or in the same place in which *Asnya*, the day lords, appear in the *Yasna* list. So therefore, in the *Yasna* list, *Asnya* probably represents the *Gāhs*, which are the sacred divisions of the day. But as certain *Yasts*, or invocations to special gods, were ordered to be recited at each *Gāh*, it is probable that these recitations may throw some light on the original meaning of the *Gāhs*. These are as follows:—

1. *Hāvani*, *Yast* No. xxxv. The *Mihir Yast* to *Mithra* and *Rāma Hvāstra*.
2. *Rapithwina*, *Yast* No. iii. To *Ashi Vahista*, and the last *Yast* to *Ātār* (*Ameritāt*).
3. *Uzāheirina*, *Yast* No. v. The *Ābān Yast* to *Ardvi Sūra Anūhita*.
4. *Aivisrūthrima*, *Yast* No. xiii. The *Fravardin Yast* and No. xv., the *Bahrūm Yast* to *Verethragna*.
5. *Ushahina*. The *Srōsha Yast*, No. xi., to *Sraosha*; the *Rashn Yast*, No. xii., to *Rashnu Razista*, and No. xviii., the *Astād Yast*, No. xvii. to *Arštāt*.

From this list it appears that there are ten gods to be invoked at the several *Gāhs*: 1. *Mithra*, 2. *Rāma Hvāstra*, 3. *Ashi Vahista*, 4. *Ātar*, 5. *Ardvi Sūra Anūhita*, 6. The *Fravardin*, 7. *Verethragna*, 8. *Sraosha*, 9. *Rashnu Razista*, 10. *Arštāt*. These ten appear to be the ten months of gestation, which I have shown to be specially connected with the five Hindu seasons, or *ritu*, of two months each.

* Again, the gods invoked at each *Gāh* give distinct evidence that the *Gāhs* originally represented the seasons, for in *Uzā-*

heirina, which corresponds to the *Idah* of the Hindu *Brāhmaṇas*, the rainy season, the god of the waters is invoked.¹ In *Aivisrūthrima*, which corresponds to the *Barhis*, or autumn, the holy mothers, the *Fravashi*, and the male god, the father, are invoked, just as in the Hindu rituals the festival to the fathers and mothers is held in the autumn. In *Ushahina*, which is the winter, or the time when the old year dies out and the new year is waiting to be born, the gods invoked are three in number, answering to the ancient generating triad of the Hindus. This is shown in the passage in the *Ashi Yašt*, which names as the brothers of *Ashi Vanguhi*, the holy mother, the patroness of married pairs, three gods (two of which are the same as those invoked in this *Gāh*) invoked in this *Gāh*, *Sraosha*, *Rashnu*, and *Mithra* of the wide pastures, who has ten thousand spies and a thousand ears. *Mithra*, who was originally the moon-goddess, is here the moon-god, or probably, like the Hindu *Daksha* and *Arṣtaṭ*, the physical generative power which is the father of the moon.

If these five *Gāhs* were included in the *Sirōzah* list, as they are included in that of the *Yasna*, the number in the former would be thirty-five, and this would be the number of the *Yasna*, if *Asha Vahista*, righteousness, and *Ameritāt*, Ahura's fire, were repeated twice over, as is done in the *Yasna* list; but when we examine the *Yasna* list still further, we do not find *Ādar* or *Ātar*, the fire-god, directly mentioned. If *Ameritāt*, which is said in the *Yasna* to be the king's soul and Ahura's fire, was originally a fire-god, the seven sacred days of the week must have anciently included the god of the fire-stick, and the people who invented the days of the week must have been the fire-worshippers who made seven their sacred number.²

¹ This god is again represented in the star *Tistrya* or *Sirius*, who appeared in the early autumn and brought the rains with him. He was also to the Greeks the harbinger of rains and fevers, II. xii. 26-31, II. xvi. 385. The goddess *Ardevi Sōra Anāhita*, the heavenly spring, from which all the waters on earth flow down, probably became the river-goddess representing the rivers *Tigris* and *Euphrates* as filling in the early autumn; but this goddess, as deified by the *Indra* or *Hea*-worshippers, made the rivers in *Babylonia* and *Assyria*, as well as in *India*, the mother of races. Before that she was the mother earth.

² The week, though a very ancient division of time, must have come into use long after months and years were invented. They could never have been known to the early seafaring mother-worshippers, from whom the Greeks and Romans

But a further examination of the Zendavesta seems to prove that the religion was founded, like that of the Hindus, on a still more archaic basis, in which five was the sacred number. For among the gods who are invoked, there are five who are especially named in the *Yas̥ts* as those to whom the old heroes sacrificed, the heroes and their sacrifices to heroes being mentioned in the *Yas̥ts* dedicated to these gods. These are (1) *Ardvi Sūra Anāhita*, No. 10 in the *Sirōzah* list, to whom the *Ābān Yas̥t* is addressed. (2) *Gōs*, No. 14, also called *Drvāspa* (she who keeps horses in health), and *Gōsārūn* (the soul (or cow) of the bull).¹ (3) *Rām*, No. 21, also called *Rām Hvāstra*, a male god. (4) *Ashi Vanguhi*, the daughter of *Ahura* and guardian of married women, No. 25; and (5) *Zamyād*, the earth, No. 28. To these gods the *Ābān*, *Gōs*, *Rām*, *Ashi*, and *Zamyād Yas̥ts* are addressed. Of these five gods, who are apparently both the gods of the five seasons and those worshipped by the earliest inhabitants of *Irāu*, four are, strange to say, female gods, and one only is a male god, for the earth is always said to be a goddess. But it is only by a comparison with the Hindu pentad that their full meaning can be understood. Of the five gods of the Hindus *Idah*, the central god, is bisexual, while the first god, the god of the two fire-sticks or *Samidhs*, is also bisexual, as it is only by the union of the two that the fire is produced, while the last or fifth god is the male father of all beings. In the Zoroastrian pentad, on the other hand, all the gods except *Rām*, the central god, are females, and are spoken of as females throughout the Zendavesta. On the other hand,

got their calendar, as no people who had ever used weeks as measures of time could have reverted to the cumbrous Roman system of *Kalends*, *Nones*, and *Ides*, while the Greek division of decades could only have been introduced after the solar year was substituted for the original lunar year. With a month of twenty-eight days, a reckoning by periods of ten days was impossible. It must have originated among the fire-worshippers, who removed the gods from earth to heaven, and introduced the custom of burnt offerings, which bore the offerings of the worshippers from earth to heaven by the agency of the sacred fire, and who, in conjunction with the *Indra*-worshippers, dedicated each period of seven days into which the lunar month was divided to separate gods, giving five days to the gods of the old pentad, the sixth day to the fire-god, as is shown in the myth of *Nābhānedishthā*, pp. 530-533, and the seventh day to the great *Ea*, the god of the divine waters. The later dedication of the days of the week to planets must date from a time subsequent to the introduction of sun-worship.

¹ *Gōs Yas̥t*, Introduction, vol. xiii. *Sacred Books of the East*, p. 110.

Rām appears in the *Yas̥ts* in two forms, once in the *Bahrām Yas̥t*, where he is *Verethragna* the male father, and again in the *Rām Yas̥t*, where he is *Rāma Hvāstra*, the god who gives good pastures, and *Vayu* the wind. This god, in his male or phallic form, is not said to have been worshipped by the early national heroes, and would thus appear to have been an imported god, while the god who gives good pastures, called by the name *Vayu* the wind, is clearly a form evolved by the *Indra*-worshippers. The name *Rām* must apparently have the same signification as the Sanskrit *Rāma*, which means darkness; and if this is the case, *Rāma* is equivalent to the *t'hom* or abyss whence all things proceed, a conception which is historically far older than that of the rain-god as the chief creator. Accordingly this pentad seems to represent the ancient creed of *Irān*, which looked on all creation as born from four mothers by the generative power given to them by the spirit of God, which dwelt in the abyss of darkness.

As for these four mothers, the first two represent the mother earth, the *Ardvi Sūra Anāhita*, and the second *Gōs*, the soul of the bull, the moon-goddess, while *Ashī Vanguhi*, the patroness of married women, is, like *Sarasvatī* in the Hindu pentad, the tribal mother, the mother of those who believed in marriage as a higher mode of existence than the tribal concubinage of the *Turanians*. The later *Sarasvatī* was apparently the mother of the *Aryans* or Northern *Scythian* races, who always seem to have made permanent marriage and household life a fundamental rule of their tribal polity.¹ The fourth mother, *Zamyād* or the Mount *Ushidarena*,² is the sacred upland country which gave birth to these Northern tribes, who were, like the Northern *Akkadians*, all mountaineers, as opposed to the Southern *Sumerians* the plain country watered by the great rivers. From these considerations it is clear that this pentad, as represented in

¹ *Ashī Vanguhi* refused to accept libations from sterile people, from old men who can have no children, the courtesans, or boys and girls. In other words, she would not receive worship from those who believed in *Turanian* customs, *Ashī Yas̥t*, x. 64, Darmesteter's *Zendavesta*, *Sacred Books of the East*, vol. xiii. p. 280. See the question further discussed later on.

² *Zamyād Yas̥t*, Darmesteter's *Zendavesta*, *Sacred Books of the East*, vol. xiii. p. 286.

the *Yasts* of the *Zendavesta*, has been altered from its original form by the innovating races who introduced household life. It could not have been made by the linga-worshippers who made the Hindu pentad; for if so, it would have made the male father *Verethragna* the central god, or at least have made the male element more conspicuous than it is in the amorphous *Rāma* the darkness; and as it is, evidently represents a unity divided into five parts from the most ancient times. It must have originally represented the five seasons of the Turanians, which was altered so as to bear a genealogical meaning by the Aryan innovators. It at first represented the mother-year of the mother-worshippers under her five aspects, as shown in the seasons.

Further evidence of the correctness of these deductions, and also of the identical origin of the three lists, is furnished by a comparison of some of the entries in them. Thus *Ardvi Sūra Anāhita*, No. 10 in the *Sīrōzah*, is *Nin-lil*, or the lady of the lower firmament, in the Akkadian list, and *Savanghi*, or the lord of cattle, in that of the *Yasna*. Now *Nin-lil* means *Nin* (the lady) of *lil* (the cloud of dust).¹ *Nin* means both lord and lady, but as there is another god of the *lil*, *Mullil*, which means the lord (*Mul*) of the dust, *Nin-lil* must mean the lady of the dust, or the mother earth. *Savanghi*, again, is evidently the same as the goddess *Savanghavāch*, who is mentioned with *Erenavāch*, in the *Ābān* and *Rām Yasts*, as the two wives of *Azi-Dahūka*, the three-mouthed snake, who was slain by *Thraētaona*, he marrying them after the death of the Great Snake of the phallic triad.² *Savanghi* means lord of cattle. *Savanghavāch* must mean lady of cattle, and the lady of the cattle of the pastures purified by the divine waters of heaven, or the *Idā*, the purified earth, as distinguished from

¹ Sayce, *Hibbert Lectures for 1887*, pp. 151, note 1, pp. 152, 154.

² *Ābān Yast*, x. 34, *Rām Yast*, vi. 24, Darmesteter's *Zendavesta, Sacred Books of the East*, vol. xxiii. pp. 62, note 2, and 265. *Thraētaona* is the *Trita Aptya* of the *Rigveda* and the *Brāhmaṇas*, the god of the sacred waters, the *Indra* who killed *Viśvarūpa* (having the form (*rupa*) of human beings (*visva*),) the three-headed *Tvashtar*, which clearly means the anthropomorphic materialistic triad of gods worshipped by the *Asuras* or snake-worshippers, *Śat. Brāh.* i. 2. 3. 1. and 2, vol. xii. pp. 47, note 3, and 48.

the earlier mother earth who delighted in libations of blood.¹ In her new form she became *Ardvi Anāhita*, the heavenly spring from which all the waters on earth flow down.² Similarly in *Erenavāch* we have a representative of *Gōs*, or *Drvāspa*. This goddess, No. 14 in the *Sirōzah*, is *Rāma Hvāstra* in the *Yasna*, and *Beltis* and *Nergul* in the *Akkadian* calendar. She represented the fourteenth day of the month, or the full-moon day. Now *Beltis* is merely a Semitic addition to the list of gods, the old *Akkadian* god being *Nergul*,³ the great *Ner*, or hero, who is husband of *Beltis*. *Beltis*, again, is properly the wife or counterpart of *Bel*. *Bel* the hero is *Bel-Merodach*, the god armed with the sickle shaped like the crescent moon, who killed *Tiamut* the dragon.⁴ In short, *Nergal* is *Bel-Merodach* the moon-god, and the fourteenth day of the full moon is that on which he completed his conquest and recovered his full form. *Rāma Hvāstra*, again, "the god of the resting place with good pastures," is in later *Mazdeism* the clouds; but in the earliest religion he is, as I have already shown, *Ramā* the darkness, the abyss whence all things are born, who is called in the *Rām Yast* the god who divides the waters, the firmament of the *Biblical* narrative. *Gōs* is *Gōsārūn* (the soul, or cow) of the bull, and *Erenavāch* is again connected with the *Akkadian Iru*, the bull, so that she means the goddess who gives life to the bull, the moon-goddess, or the mother firmament of heaven. Again, while *Ahura Napāt Apām*, the son of the Waters, No. 21 in the *Yasna* list, exactly corresponds with the *Vayu*, the later form of *Rāma Hvāstra*, *Sin*, the moon in the *Akkadian*, represents an earlier form of the

¹ But *Savanghavāch* may be derived from *Savah*, the Eastern region of the *Bundahis* (West's *Bundahis*, xi. 3. *Sacred Books of the East*, vol. v. p. 33), and if *Vāch* has the same meaning in *Zend* as in *Sanskrit*, *Savanghavāch* would mean she who speaks the Eastern tongue, and *Erenavāch* she who speaks that of *Irān* or of the country of *Iru*, the bull.

² Darmesteter's *Zendavesta*, Introduction to *Abū Yast*, *Sacred Books of the East*, vol. xliii. pp. 52, 53.

³ Sayce, *Hibbert Lectures* for 1887, p. 195.

⁴ Sayce, *Hibbert Lectures* for 1887, pp. 101-103. Can *Tiamut* have any connection with the *Dravidian Tai*, the mother? If so, the victory of *Merodach* would tell not only of the conquest by the moon of the dragon, which was trying to devour it, but also of the conquest of the worshippers of the mother earth by the moon-worshippers.

chief god of heaven, while Bel and Beltis, No. 25 in the Akkadian list, is the married Bel, which is equivalent to the sacred Fravashis, or wives, in that of the Yasna list, to the Ashi Vanguhi of the Sirōzah. This last goddess is the mother goddess of the races who introduced household life and marriage, and thereby superseded the Turanian customs of tribal life and temporary unions. She is represented in the Ashi Yašt as escaping from the Turanians and the swift-horsed Naotaras by hiding first under the foot of a bull, and afterwards by hiding, like Ulysses escaping from the cave of the Cyclops, under the throat of a ram.¹ In the Ābān Yašt the Naotaras are again mentioned as the lords of swift horses, and their kings are named as Vistāspa, who was not a Naotara himself, but who married Hutaossa, a Naotara heiress, and who was the great supporter of Zarathustra's reforms.² Another king named is Vistauru, the son of Naotara. The whole story shows that household life and marriage were introduced by the race of horsemen who were the worshippers of the bull, and who were the sons of Kaš or Kasyapa, and that this reform was afterwards insisted on by the Aryan and Semitic tribes, who worshipped the ram, Varuna's victim, which was offered up by Abraham as a substitute for his son.³

In No. 28, the day sacred to Zamyād, there is a similar agreement in the three lists, Hea or Ea the water-snake god, represents the old Akkadian earth god. While there is evidently a correspondence between Ushahina, the ruling god of the winter season, and the earth which is represented in the Hindu mythology by Kadrū, the mother earth, who rules the last month of the lunar year, and whose connection with Zamyād is shown by the name of the mountain Ushidarena, the equivalent of Zamyād. But we also find in the above analysis further evidence as to the process by which the reckoning of time was evolved. The first measure of

¹ Darmesteter's *Zendavesta*, Ashi Yašt, x. 54-56, *Sacred Books of the East*, vol. xxiii. pp. 280-281.

² Darmesteter's *Zendavesta*, Ābān Yašt, xxii. 98, xxiv. 105, and xix. 76, *Sacred Books of the East*, vol. xxiii. pp. 76, 77, 78 and 71.

³ Śat. Brāh. ii. 5. 2. 16, vol. xii. p. 395; Gen. xxii. 13.

continuous time was the five seasons; but when shorter periods required to be reckoned in order to insure the offering of sacrifices on the correct dates, the next guide sought was the waxing and waning moon. It was this reckoning which made the fourteenth day, dedicated to the conquering moon-god, a specially holy day; but this did not allow for the sanctity of seven, as five was the sacred number of the early Turanians. The sacred number seven was evidently a later addition of the fire-worshippers and the worshippers of Hea, the god of the waters. It was Hea, the great god of the Sumerian Asuras, who became Ahura Mazda, and ruled the first day of the sacred week, while Ameritāt, Ahura's fire, ruled the closing day. The religious reforms which these additions to the calendar imply were both the work of the Northern races, and they must have been made after they came southward, as Prof. Darmesteter, by his reference to the Norse *fimt* or five days week,¹ shows that the sacred five days which was used by the Mazdeans in reckoning the lunar month of thirty days, was also known in the Aryan North. Prof. Darmesteter also shows though the seven holy Amesha Spentas ruling the first seven days of the month were worshipped in the Sīrōzah; yet in the calculations for lunar sacrifices the month of the thirty days was divided into six periods of five days each.

But the original sacred number of days was, as I have shown, fourteen, and not five or a multiple of five, though these perhaps might have been used before the moon was used as a measurer of time. As soon as time began to be reckoned by lunar periods, the days of each period were calculated as fourteen in number, and further convincing proof of this fact is shown in the Hindu names of the lunar days belonging to the Karāṇas or half days of the lunar month. The names of these are as follows:²

¹ Darmesteter's *Zendavesta*, *Mith Yasht*, 3, *Sacred Books of the East*, vol. xxiii. p. 90, note 5. He shows that in the Mazdean ritual, as set forth in this passage, the first fifteen days of the month were divided into three parts of five days each, called the "panchak farjam" or "antare maungha," the moon within, the "panchak datigur," the "hereno maungha," the moon full, the first quarter, and the panchak asigur, the vishaptatha, belonging to the full moon.

² Alberuni's *India*, Sachau's edition, chap. lxxviii. vol. ii. p. 107.

The white or light half of the month.		The dark or black half of the month.	
1 Amāvāsyā	9 Atīn	17 (1) Barkhu	26 (10) Dahīn
(new moon)	10 Navin	18 (2) Biya	27 (11) Yāhī
2 Barkhu	11 Dahīn	19 (3) Triya	28 (12) Duvāhī
3 Biya	12 Yāhī	20 (4) Caut	29 (13) Trohī
4 Triya	13 Duvāhī	21 (5) Panchī	30 (14) Chaudahī
5 Caut	14 Trohī	22 (6) Sat	
6 Panchī	15 Chaudahī	23 (7) Satīn	
7 Sat	16 Purpima	24 (8) Atīn	
8 Satīn	panchāhī	25 (9) Navin	

Now of these names Amāvāsyā means the new moon, but all the rest are merely ordinal numbers, extending from one to Chaudahī the fourteenth. After the first fourteenth Purpima Panchahī, meaning the completed fifteenth, is added; but this, like Amavasya, is a later addition, and the naming of the days of the first half of the month by a notation in which the day, according to the calendar, is one day more than is expressed in the ordinal number by which it is named distinctly shows that originally twice fourteen or twenty-eight days formed the lunar month, which was the earliest measure of time reckoned after the five seasons, and therefore the twenty-eight Nakshatras must have represented the twenty-eight days of the lunar month. This conclusion answers the first question, and the evidence I have adduced to prove this also answers the second, as it shows that the Nakshatras first received names as representing the days of the lunar month, and that under these names they were included in the thirty-three gods of time, the lords of the ritual order.

We now proceed to the third question. *How was the original year measured by months reckoned, what number of months did it contain, and what was the number of days in the month of the first and subsequent collections of months used to measure time exceeding one month?* An answer to this has been begun by the proof adduced to show that the original year was one of five seasons. These were the five ancestral gods to whom sacrifices were offered by the first ritualists. But this division of time must have been made by a people

living in a country where there is a monsoon or rainy season, and this must have been the Lower Euphrates valley near the Persian Gulf. It was thence that the five seasons were brought, both to the Zoroastrian districts lying between the Caspian Sea and India, and also to India itself. The gods of these five seasons must have been originally the central abyss or t'hom, and her four daughters, the mothers of the whole earth, and of all beings living on it, of the heavenly bodies, and those of the tribe and country to which the worshippers using the ritual belonged.

I have now succeeded in proving that the year began with five seasons used as a measure of time by the people living on the Persian Gulf, who diffused their mode of reckoning time through the adjoining countries, and have also shown that after the seasons lunar months of twenty-eight days were first reckoned. I must now proceed to consider the evidence proving when periods of time exceeding one month began to be measured by months instead of by seasons.

Among both the Romans and Hindus we find distinct mention of a sacred period of ten months, representing the period of gestation, which is called by the Romans an "annus" or ring of time. In the Mahābhārata these ten months appear as ten of the fifty daughters of Daksha, who are the wives of Dharma, the embodiment of the heavenly immutable law,¹ the others being the thirteen wives of Kaśyapa, the thirteen months of the full lunar year, and the twenty-seven Nakshatra or wives of the moon, representing the lunar sacrificial year of the five years cycle. These can only be ten lunar months of twenty-eight days each, making forty weeks. These ten months of gestation are frequently mentioned both in the Rigveda and the Mahābhārata.² This second period was subsequently increased to eleven months,

¹ Dharma, Law, is the exact equivalent of the Greek *δίκη*, the goddess of law and order, who is named by Hesiod, Theog. 16, as one of the great gods, and who is identified by Æschylus, Prom. 18. 205. 874, with Gaia the earth, and named as one of the older gods, Liddell and Scott, s.v. *δίκη*.

² Rigveda v. 78. 7, x. 184. 3; Mahābhārata, Vana Parva, cxxviii. p. 388, where, in the story of Janta, he is born ten months after the sacrifice which had made his mother pregnant; also Vana Parva, cxxxi.–cxxxiv. pp. 402–405, where the ten months of gestation are referred to in the dispute between Ashtavakra and Vandin as to the sanctity of numbers, and many other places.

as is shown by the mention of eleven Rudras among the thirty-three gods of time, by the eleven victims offered at the great annual animal sacrifice, by the eleven stanzas of the *Apri* hymns recited at the annual animal sacrifice to the gods of the year, and by the number eleven sacred to the older gods. But the proof in Hindu ritualistic mythology of the sanctity of the periods of ten and eleven months, though very strong, is only deductive and inferential, and not absolutely so strong as that furnished by the Roman "annus" of ten months. This "annus" or year is called the year of Romulus, and is under this name minutely described by three authors, Censorinus, Macrobius, and Solinus, of whom the first two are described by Sir G. Lewis as "learned and intelligent antiquarians."¹ They say that this year consisted of ten months, beginning with March, and that of these ten months six, April, June, August, September, November, and December, were hollow months of thirty days each, and four, March, May, July, and October, were full months of thirty-one days each, so that the whole ten months contained 304 days. To these 304 days Numa Pompilius, who reformed the year, added fifty-seven (57) days, twenty for January and twenty-eight for February, and thus made the whole year 361 days; but this period does not agree with any solar or lunar year. The whole year of twelve months of thirty days each, which I will show later on to have been most generally used, only contained 360 days, and another year also used, of alternate months of twenty-nine and thirty days, only contained 354 days.

But besides this, there is another difficulty as to the acceptance as absolutely correct of the statements of these three authors as to the history of the Roman year. Ovid, when speaking of the year of ten months in the *Fasti*, distinctly says that it consisted of the ten lunar months of gestation :²

¹ Lewis, *Astronomy of the Ancients*, p. 56. He cites Censorinus, c. 20; Macrobi. Sat. 1. 12, § 3, 38, 1. 13, § 1-7; Solinus l. 37-38. See also p. 36.

² *Ov. Fasti* iii. 121.

*"Annus erat decimum cum luna receperat orbem.
 Hic numerus magno tunc in honore fuit
 Seu quia tot digiti per quos numerare solemus
 Seu quia bis quino femina mense parit."*

The ten Romulean months described above are distinctly solar months, as they each, with the exception of August and December, contain exactly the same number of days as are reckoned in these months in the Gregorian solar year. The days thus computed could only have been assigned to these months by persons dealing with a solar year. But the ten sacred lunar months must have contained 280 days. And the addition of fifty-seven to this number would only make 337 days, which can never have been reckoned as the number of days in the year. But if, instead of taking ten solar months as making the Romulean year, we take eleven lunar months of twenty-eight days each, the number sacred to the eleven Hindu Rudras, we find that they contain 308 days, and if the fifty-seven days of Numa Pompilius be added to these, the total will be 365 days, which almost exactly represents the solar year.

The accounts as to whether Numa knew the real length of the solar year are conflicting,¹ but there is no doubt whatsoever that a system of correcting time by intercalations was introduced and used by the priests to bring the solar-lunar year of 354 days and that of 365 days into harmony, and that this system was so badly worked as to produce the confusion which was remedied by the Julian year.

It cannot therefore be determined whether the explanatory suggestion I have made is actually correct; but at any rate it presents a much more likely solution of the problem than that offered by the Roman authors, who knew only of lunar months of twenty-nine and thirty days, and whose calculations must be erroneous, as they used solar months of thirty and thirty-one days to measure time reckoned by lunar periods. By taking eleven lunar months instead of ten solar months, and retaining the fifty-seven days said by tradition to have been added, we arrive at a statement of the length of the solar year

¹ Lewis, *Astronomy of the Ancients*, p. 40.

correct enough for ordinary purposes, and very nearly astronomically exact. And it is certainly most probable that whoever undertook to reform the calendar knew at least that the solar year contained 365 days.

But there is another explanation of these proceedings which also appears to possess some probability. If the number of 304 days for the ten months is retained, and instead of the arbitrary numbers of twenty-eight days of January and twenty of February, sixty days, making thirty-one for January and twenty-nine for February, be added for these two months, the result would give a total number of 364 years, or a complete lunar year. As it is certain that a lunar year of thirteen months, and 364 days, was used before the solar year, this may probably have been the reform of the mythical king known by the name of Numa Pompilius, which may have been confused by tradition with the subsequent revision of the year on the introduction of solar reckoning.

The whole story is evidently an attempt to account for the year of ten lunar months. And to do this it was necessary for those who knew only of the later solar year to add two months to the original ten; but that this explanation is not correct, is proved conclusively by the fact that *Januarius*, which means the opening month, was always the first month of the year, and must have been so when the name was given. What is absolutely certain is, that the ancestors of the Romans and the original authors of their ritual regarded the ten months of gestation as an especially sacred period, while there is the strongest reason to believe that they, like the Hindus, also looked on eleven months as sacred, and that they used a lunar year of thirteen months, or 364 days, before they used a solar year.

The original existence of an independent lunar year, universally accepted by all the civilized nations of the ancient world, is conclusively proved by the persistent attempts made by astronomers in all countries where their science was studied to assimilate the solar and lunar years. Of these attempts, the following may be mentioned: In Greece there was (1)

the ancient Athenian cycle of three years, called the *τριετηρίς*, in which a month of twenty-nine days was intercalated every second year after Poseidon.¹ (2) Meton's cycle of nineteen years, dating from B.C. 433, followed one hundred years after by that of Calippus, which quadrupled the period of the Metonic cycle, and these both contained years of thirteen months as well as years of twelve.² Besides these, there were other changes, such as that of Solon. In India there was the five years' cycle, and the year formed by the addition of twelve days to the lunar year of 354 days, spoken of in the *Rigveda* as the rest of the Ribhu in the house of Agohya.³ In Egypt there was the Sothic cycle used in Rome, and to these must be added the changes already spoken of. But these endeavours to make the two years commensurate, while they testify to the previous existence of a lunar year of thirteen months, all prove its extreme antiquity.

In treating of the Indian year, Zimmer, who argues the question very fully, thinks that only solar years and the lunar-solar recognized by the five years' cycle were known to the authors of the *Rigveda*.⁴ But this conclusion, I must say, seems to me to be very doubtful. It is true that twelve months are usually spoken of, and that in the great cosmological hymn, the seven hundred and twenty sons of the three fathers and the three mothers, meaning the three hundred and sixty days and nights of the year, are spoken of as passing through the heavens in the chariot of time with its twelve spoked wheels, and in another stanza the twelve months of the year with their three hundred and sixty spokes are named.⁵ But even in this hymn, which is unfortunately very obscure, there seems to be distinct mention of a thirteenth month of the year. Stanza 15 runs thus:—"From that which is begotten in the self-same manner (that is, in

¹ Zimmer, *Altindisches Leben*, p. 370.

² *Encyclopædia Britannica*, Calendar, vol. iv. p. 668.

³ Zimmer, *Altindisches Leben*, chap. xiii. p. 366; *Rg. iv.* 33. 7. The Ribhu are the genii or guardians of the year, who in their three-wheeled chariot (the three seasons) pass through heaven without horses, and by these changing seasons make earth and heaven young again, *Rg. iv.* 36. 1.

⁴ Zimmer, *Altindisches Leben*, chap. xiii. pp. 364-374.

⁵ *Rg. i.* 164, 11 and 48.

the way in which the year, the son of the universal mother, was begotten by thought), meaning the self-begotten (see stanza 8), they call the seventh month the single born (that is, the self-produced). The six paired months (the twelve) the wise call 'those begotten of the gods.' Under her rule (that of the seventh, the unpaired, or thirteenth, month) the wished-for (children) are ranged in order. In her region those of diverse mien range themselves in their places." This, it seems to me, can only refer to the moon which, as Pushkarā, the goddess of the divine lotus, is ruler of the month of the summer solstice, and thus ruled the remaining months of the year.

The mention in another hymn of the thirteenth month as known to Varuṇa, the lord of order, besides the twelve months rich in children,¹ also shows that the thirteenth month was known to the authors of the Rigveda. Zimmer explains this by insisting that the authors of the Rigveda knew and used the five years' cycle, but this cycle, as explained in the calendar in the Taittiriya Brāhmaṇa, quoted by Max Müller, does not make any mention of thirteen months; it makes the lunar year to consist of twenty-seven Nakshatra or phases of the moon, included in a year of twelve months and six seasons, and the correspondence between the solar and lunar computations is effected by making the lunar "tithes" or days shorter than the solar days, there being 1860 lunar days in a lustrum of five years, to 1830 solar days.² But at the same time the mention of twenty-seven Maruts or Nakshatra in the Rigveda³ can only have been made by an author who knew of the twenty-seven Nakshatra of the cycle. Otherwise he would have spoken of twenty-eight Maruts. Zimmer again explains the allusions in the Veda to the ten horses of the car of time, and the five divisions of time represented as five made into six,⁴ as denoting the five years' cycle; but this is very doubt-

¹ Rg. i. 25. 8.

² Max Müller, Preface to vol. iv. of edition of the Rigveda, pp. 34 and 35, 55 and 56.

³ Rg. i. 13. 3. 6.

⁴ Rg. iii. 65. 18; Zimmer, Altindisches Leben, chap. xiii. p. 368.

ful. The five and six almost certainly, as I have shown, refer to the five and six seasons, and the ten horses are the ten months of gestation. Thus, in stanza 12 of the cosmological hymn (Rg. i. 164), to which he refers, the father, divided into twelve parts (or the year of twelve months), is said to be five-footed, and hence in the next stanza (13) the wheel of time is said to be five-spoked, and on this wheel all living beings rest. Surely this means the five seasons, which are parts of the year, and not the five years' cycle, which is a multiplication of it, nor the five wet months, as Grassmann conjectures. Similarly, in stanza 14, which Zimmer quotes, the car resting on this wheel is said to be drawn by ten horses, but these cannot be the ten half-years of the cycle, which would not draw the five seasons of the year, but must be the ten months of gestation, in which the year was brought forth. It is true that the last lines of this stanza say that the sun wanders through space and surveys all things; but this mention of the sun does not justify an interpretation of the previous lines, which can only be made by wresting the obvious sense, which, when fully considered, is quite capable of explanation without doing any violence to the plain meaning of the words. The author of the hymn, like the authors of the *Brāhmaṇas*, seems to have known both of the years of twelve months and that of thirteen, and to have regarded the year of twelve months as the orthodox year, but to have remembered that the old ritual recognized the older year of thirteen months, which he looked at in the same light as that in which it was regarded by the authors of the *Brāhmaṇas*, who said that twelve cups of Soma must be drawn for the twelve months of the year, but that the priest may also draw thirteen, "for they say there is a thirteenth month."¹

The whole hymn is intended to represent the different phases of the course of the year and the different lights in which it was regarded in the sacrificial ritual, and has nothing to do with a five years' cycle. The first ten stanzas tell of the birth of the year-calf, begotten from the mother

¹ Śat. Brāh. iv. 3. 1. 5, vol. xvi. p. 318.

earth by the thought of the heavenly spirit which filled her with the sacred mist impregnated by the water of life, from which her son (the year) was born (stanza 8).

It is in short the legend of Manu and the birth of Idā in another form, transferred to the birth of the year. The next five stanzas, 11 to 15, tell of the growth of the year, and the numbers of the stanzas throughout are so arranged as to make up a complete compendium of the differing ritualistic doctrines as to the measurement of time expressed in the sacred numbers which conveyed to the early ritualist the deepest meanings wrapped in a symbolic shorthand which interpreted by a few figures what would have occupied much time and trouble if conveyed in words which, before the invention of writing, had to be learnt by heart, and which, even after the invention of writing, could only be recorded by the expenditure of much labour, and which even then could only be communicated very slowly.¹ Thus in this hymn, the first ten stanzas represent the ten months of gestation, the next five the five seasons, and the fifty-two verses which complete the hymn represent the four lunar years dedicated to the four Agnis, making up between them the two completed pairs necessary according to the idea of production underlying the ritual, to produce a perfect sacrifice. The four solar years also dedicated to the same four Agnis are completed in the 48th stanza which runs thus: Twelve felloes (the twelve months) are fixed in one wheel, with three naves (the seasons). Who understands this? To this there are fixed three hundred and sixty unwavering steadfast spokes (the days). Thus this stanza sums up the measures of time of the Northern nations, the twelve months, the three seasons, and the three hundred and sixty days. The whole hymn is, like the Brāhmaṇas, a unification of the Southern ritual, with its five seasons, ten lunar months

¹ I would here remark upon the obvious advantage gained in a time when writing, if known at all, was only known to a select few, and the wide diffusion of knowledge by writing was exceedingly difficult, by a system which embodied the meaning of many sentences in numbers. Similarly, myths were exceedingly useful, as arranging in a form easy of recollection the history of centuries. Thus a whole epoch was comprehended in a name which to the instructed formed an excellent *memoria technica*.

of gestation, and the year of thirteen months, with that which is based on three seasons and solar time. It represents the union of the five lunar races represented by the five snake gods with those who are descended from the three fathers and three mothers, the two being united by the fire-god, the fourth Agni, who thus makes up the nine, the sacred number of the Vishnu worshippers embodied in their nine Rudras.

But whether this attempt to interpret the inner meaning and some obscure passages of a very obscure hymn be or be not considered as argument sufficiently strong to help materially towards a conclusive proof of the ancient methods of measuring time and their history, one thing is certain, that the Hindus used a year of thirteen months before they used the solar year, and that it is these months which are spoken of in the *Mahābhārata* as the wives of Kāśyapa. If these thirteen months had ever been used as an intercalary year in India before the five years' cycle was adopted, a use of which I have found no evidence, the first month of the thirteen (*Āditi*) would not on that account have been made the parent of the twelve *Ādityās*, the solar months, and yet they are said in the *Mahābhārata* to be her sons.¹

But though the evidence I have now adduced proves that a lunar year of thirteen months preceded the solar year both in Europe and India, yet it does not show quite conclusively that these years both originated in one common centre. For this purpose it is necessary not only to consider more fully than I have yet done the significance of the fifty great gods of the Akkadians, the fifty daughters of Danaus and Endymion, and also the fifty sons of Priam, who will be shown to contribute most important evidence as to the true meaning of these fifty gods and goddesses. I will also show that there is both in the Bible and the *Zendavesta* most important evidence to show that this early year was first used in the Euphrates valley, and thence transported with the other measures of time to Egypt and Europe.

In Part III. of this series of essays I, on the authority of

¹ *Adi (Sambhava) Parva*, liv. p. 165.

the Mahābhārata, asserted that the fifty gods of the Akkadians, the daughters of Danaus and Endymion, must, like the daughters of Daksha in the Mahābhārata, mean the twenty-seven lunar periods, the thirteen months of the lunar year and the ten months of gestation.¹ But I have in this essay shown that the twenty-seven Nakshatra were only used in the Hindu five years' cycle, and that the original number was twenty-eight, representing the twenty-eight days of the lunar month; and therefore, unless it can be proved that this cycle was used in other countries where we find the fifty gods, twenty-seven could not be one of the component numbers of the sacred fifty. Now these fifty gods, if they included a solar element like that of the twenty-seven Nakshatra, must show some traces of a solar origin; but of this there is no trace whatever in the story of Endymion and Danaus. The mother of the daughters of Endymion is Selene, the moon, and their father is the phallic god. Legend does not tell of the mother of Danaus's daughters, but he himself is also the phallic god, the Hindu Danu, the strong man, the father of the Dānava of the Mahābhārata, and the Turanian Dānus of the Zendavesta.² But it is in the case of Priam and his fifty sons that we find the strongest evidence of the infiltration into Greece of early lunar Hindu Mythology. Priam is, like Dhritarāshtra, who is the father of the Kaurāvyā, a blind king, that is, he is the phallic god who is, like the earlier Cupid, blind. Priam's wife is Hecuba, who must represent the mother earth before the consecration of Ida, the mother mountain of the Troad. Gandhārī, the wife of Dhritarāshtra, had one hundred sons, who were all born from an egg like a ball of flesh as hard as iron, which had been two years in the mother's womb. When Gandhārī reproached the Rishi Vyāsa (the uniter) with this apparent failure in the fulfilment of his promise that she should have one hundred sons, he directed that the ball should be sprinkled with water, that is, that it

¹ Part III. J. R. A. S. July, 1869, pp. 550, 559; Mahābhārata, Adi (Sambhava) Parva, lvi. p. 189.

² Darmesteter's Zendavesta, *Ābān Yast*, xviii. 73, and *Farvardin Yast*, ix. 37. 38, *Sacred Books of the East*, vol. xiii. pp. 71 and 189, in both of which places the Dānus are called Turanians.

should be sanctified with the water of life, and it then became divided into "into one hundred and one parts, each about the size of the thumb." These were then put into pots of clarified butter, the divine seed, and kept carefully covered for two full years, when a hundred sons and a daughter, named Dussalā, who was married to Jayadratha, king of the Sindhus,¹ were born. Now these one hundred and one persons represent the fifty-one gods of the lunar ritual, with their mother, the moon-goddess, which bore them all,² the twenty-eight Nakshatra, the thirteen months of the lunar year and the ten months of gestation, and they were snake-gods as they came alive out of the egg like young snakes, and were born by the help of the two great phallic gods, the Rudra, or god who lives on butter, and the later god of the fertilizing waters, who gives the first impulses which are fostered into life by the phallic father. The remaining fifty represent the fifty gods as worshipped by the sun-worshippers after the reconciliation of the two calendars by the adoption of the cycle containing the lunar year of twenty-seven Nakshatra. This legend is clearly intended to give an account of the origin of the Kaurāvyā, or snake-worshipping races, and as they certainly came to India from the Euphrates valley, it is probable that the original list of fifty gods did so too, but these fifty gods must, if there is no addition to make a fifty-first, represent the twenty-seven Nakshatra as forming part of the combination. In the Greek stories of the daughters of Endymion and Danaus there is certainly the phallic father, and in that of Endymion there is also, as in the Hindu myth, the mother moon to make up the fifty-one lunar gods recognized before the invention of the five years' cycle; but in the Akkadian numeration it appears that the father and mother are wanting, and that therefore the fifty great gods must date from a later period than the fifty-one, and that they must

¹ *Adi (Sambhava) Parva*, cxv.-cxvii. pp. 337-342.

² *Gāndhārī* is the moon-goddess, and so is *Dus-shalā*, *Gāndhārī* being the original moon-goddess of the sons of Kasyapa, and *Dus-shalā* the moon-goddess of the Sindhus. *Dus-shalā*, according to the legend of the *Mahābhārata*, was born after her brothers, being produced from the egg by the Rishi Vyāsa, at the special request of *Gāndhārī*, *Adi (Sambhava) Parva*, cxvi. pp. 340, 341.

have been adapted to a people who believed the gods of time to be self-created, and who had tried to reconcile the solar and lunar calendars by the adoption of the five years' cycle, which was afterwards transferred from the Euphrates valley to India. In the myth of Priam we find the same number of lunar and solar elements as in the Hindu story of Dhritarāshtra and his sons. First, in both cases the father is blind, and in both there is a distinct connection between the solar and lunar reckoning of time. But Hecuba does not have one hundred, but fifty sons, and not one daughter, but twelve. In the Trojan legend the symbol of the producing mother is transferred to the twelve solar months, while the fifty sons and their blind father make up the fifty-one gods of the snake and moon-worshippers.

But another proof of the extreme significance of numbers in ancient legends is given by the poems in which the myths I have here spoken of are developed. I have already shown that the eighteen books of the Mahābhārata represent the twelve months and the six seasons, and in the same way Homer's Iliad and Odyssey, each of which contain twenty-four books, both represent a completed sacrificial period of two productive years, as the best offering which can be made by the singers or poets, who are the high priests of the goddess of speech. The Iliad represents the war of the sun-worshippers with the moon-worshippers of the Troad, for the possession of Helena, who is, as Max Müller has shown, the Sanskrit Saramā, the dawn, and Paris is the Greek form of the Sanskrit Paṇis, the greedy avaricious moon-worshippers.¹ Both the Iliad and Odyssey are representations of the solar myth, and of the contest between the sun and moon-worshippers, the latter being vanquished at Troy in the Iliad, and slain by Ulysses in the disappointed suitors of Penelope in the Odyssey. But for the immediate purpose of my present argument, the proof given by these poems, and the Mahābhārata, of the importance anciently attached to divisions of time by early authors, is most significant. The Iliad and Odyssey both, in the number of their books, show

¹ Max Müller, *Lectures on the Science of Language*, 2nd series, pp. 470, 471.

the value assigned to pairs of years, and the *Mahābhārata* shows that given to a single completed year. It was in the form of years that the ancient poets, the earliest historians, produced the poetical accounts of the epochs they tried to depict, and it was necessarily in the form of years that their successors, the earliest historiographers, whose history was exhibited in the form of genealogies, cast their narratives. A conspicuous instance of this early form of history is given in the genealogies of the patriarchs in the Book of Genesis. An examination of the early genealogies given in chaps. iv. v. and xi. of this book show that in each genealogy the number of ancestors given is thirteen. It has been already suggested by Ewald that the first two genealogies had some connection with the solar year, as the name Enoch, which means the beginner, like the Latin Janus, the Hindu Āditi, and the Egyptian Ptah, seemed to him to mean the solar year, which recurs every three hundred and sixty-five days, the number of years of Enoch's life. He thought also that as Mahalaleel means the god of light, he may have something to do with sun-worship.¹

But before discussing the question connected with these genealogies further, it will be better to place them side by side.

I.	II.	III.
Male and female line. Gen. iv.	Male line. Gen. v.	Line of Shem. Gen. xi.
1. Adam	1. Adam	1. Noah
2. Eve	2. Seth	2. Shem
3. Cain	3. Enos	3. Arphaxad
4. Enoch	4. Cainan	4. Salah
5. Irad	5. Mahalaleel	5. Eber
6. Mehujael	6. Jared	6. Peleg
7. Methusael	7. Enoch	7. Ren
8. Lamech	8. Methuselah	8. Serug
9. Adah	9. Lamech	9. Nahor
10. Zillah	10. Noah	10. Terah
11. Jabal	11. Japhet	11. Abram
12. Jubal	12. Ham	12. Nahor
13. Tubal Cain	13. Shem	13. Haran

¹ Ewald, *History of Israel*, edited by Martineau, 4th edit. vol. i. pp. 266, 267.

It is universally admitted that in the first two of these genealogies the names in both, from Cain and his counterpart Cainan to Lamech, are practically identical, while Adam and Enos both mean "the man," Seth means "the germ," and Cain "a created thing." But it is in Lamech and his wives that the meaning of these genealogies is most clearly seen. Dr. Sayce has shown that Lamech is the Semitic equivalent of Lamga; and Lamga, as I have pointed out,¹ is exactly the same word as the Hindu Linga, the sign of the phallic god. Dr. Sayce further suggests that the song of Lamech in verses 23 and 24 of Gen. iv. means that Lamech had slain as a young man the god Tammuz; Yeled, the word used in Genesis for young man, being the equivalent of the Assyrian Ilatta, the title of Tammuz.² Thus Lamech and his two wives would represent the winter months following the autumn, which kills the old year Methuselah or Methusael, the same word as Mutu-sa-elati, the husband of the goddess, that is, the god Tammuz. But these wives, whose names mean darkness and shade (Assyrian edu and tsillu),³ would thus be the moon and earth goddesses of the Hindu triad, and Savanghavāch and Erenavāch, the wives of the great snake Aži Dahāka in the Zendavesta, who was slain by Thraētaona in the land of Bauri or Babylon.⁴ They would thus represent a year closing with the winter solstice and beginning with the months represented by the sons of Lamech. The year would thus, like the Roman year, close with the tenth month December, and begin with the month called Jabal or Abel, the Assyrian Ablu, meaning the son

¹ Part III. J.R.A.S. July, 1889, p. 538.

² Sayce, Hibbert Lectures for 1887, p. 186, note. He also, in p. 185, identifies Enoch with the Akkadian Unuk, the place of settlement, the ancient name of Erech, and thinks that this was the city which Cain built, and called after his son Enoch. He also connects Jared and Irad with Eridu, the great port of the Sumerians, the three names being identical. Again, he thinks that Methusael and Methuselah are the same as Mutu-sa-elati, the husband of the goddess, i.e. the sun-god Tammuz, the husband of Istar, who had a shrine in the forest of Eridu, while Istar was the presiding deity of Erech.

³ Lenormant, *The Genealogies between Adam and the Deluge*, *Contemporary Review*, April, 1889, p. 573, says Adah means beauty. I have given the meanings given by Dr. Sayce.

⁴ Darmesteter's *Zendavesta*, *Aban Yasht*, viii. 31, *Sacred Books of the East*, vol. xxiii. pp. 60 and 62.

(of the old year). But, in addition to these sons, a sister of Tubal Cain, named Naamah, is mentioned in *Genesis*, and there appears to be considerable doubt whether there is any real difference between Jabul (Yabul) and Jubal (Yubal), both coming from Ablu, and though Ewald suggests that Jabul may mean the husbandmen, and Jubal the musicians, or learned class, it seems likely that they both refer to the class of shepherds to whom Abel, whose name is the same as theirs, belonged, and who have always been connected with music and poetry. The mention of Naamah in the genealogy and the almost complete identity of the names Jabul and Jubal, makes it likely that she once had a place in it; and if it represented, as I hope to prove, the months of the year, it is all but certain that she was reckoned among them. Naamah, which means "the pleasant, the graceful one," had, as Lenormant has pointed out, the same name as a Phœnician goddess, whom the Greeks called Nemannum, or Astronome (Ashtar No'ema), who was the prototype of Aphrodite, the great mother.¹ Māghā, the Hindu month of the great mother, as well as Tai the mother, were the first two names of the months of the Hindu year,² and Naamah or her equivalent must have occupied a similar place in the calendar from which this genealogy was taken. But as the Hindu year, which originally began with Tai, the mother, was made to begin afterwards with Push, the bull-god, so the original mother of the Semitic year was changed to Ablu the son. But if these names represent the first months of the year, the month represented by Adam must have been that of the vernal equinox, and the calendar must have been altered by the sun-worshippers. But this interpretation, which would make Adam represent the first month of the year, beginning at the vernal equinox, only depends upon the assumption that the lines attributed to Lamech, and representing him as causing

¹ Lenormant, *Genealogies between Adam and the Deluge*, Contemporary Review, April, 1880, p. 575.

² In the list of names of months taken from the *Taittiriya Brāhmaṇa* in Max Müller's Preface to vol. iv. of the *Rigveda*, pp. 34 and 35, Tishya is entered as another name for Pāṇya, the first month, and this shows that the Tamil list, which began with Tai, was the standard form from which the names of the months were taken.

the death of Tammuz, represent the original meaning of this genealogical year. If these lines are a later addition, as I think is probable, Adam would be the same month as the Hindu Āditi, and would mean the great mother earth, the first month of the original lunar year beginning with the winter solstice, and Eve would be the Magha, the heavenly mother, the moon-goddess. Lamech and his two wives, Adah and Zillah, would then be the last three months of the year of generation ending with the tenth month, the Hindu Pradhā, Visva, and Vinatā. Pradhā, the mother of the Apsaras,¹ daughters of "Apsu," the dark abyss. The t'hom is Adah, "darkness"; Visva, meaning "beings of both sexes," is Lamech, the bisexual parent, and Vinatā² or Zillah, "shade," the mother of the handicraftsmen represented by Tubal Cain; while Naamah, "the beautiful," would be the purified mother, the Aphrodite sanctified by the waters, who was also, like the arts of the handicraftsmen, the daughter of thought, or of Manu, the thinker. She, Tubal-Cain, and the northern shepherds, or Jubal, would close the year which they had worked out by making the sacred ten months of generation, with the additional month dedicated to the fire-god of the metal workers, the sons of Tubal Cain, the full year of thirteen months, the year of the sons of Kaśyapa. Under this arrangement, Lamech and his wives would represent the fathers and mothers who were worshipped in the tenth month. This was an earlier form of the myth of generation than that which connected them with the abyss as their generator. The latter was mystical, and must be later than the anthropomorphic explanation. After the original father and mothers, came the three months whose duty it was to prepare for the birth of the coming year. I have already shown that in the Hindu year beginning with the winter solstice the moon-goddess, known to the Hindus as Pushkarā, the lady of the divine

¹ Ādi (Sambhava) Parva, lrv. p. 187.

² Vinatā must be the mother, as the tenth of the wives of Dharma, who represent the sacred months of gestation, was Matī the mother, Ādi (Sambhava) Parva, lrv. p. 189. Böhtlingk-Roth connect the word Vinatā with a root meaning to bow down. It is apparently connected with Vigā, the lute, which brings forth music. See Part III. J.R.A.S. July, 1889, pp. 551-553, also p. 556. In p. 545 I have connected Vinatā with "vinsati, twenty," but this is perhaps untenable.

lotus, and to the mother-worshippers as Chitrangada, the coloured bracelet (*chitra*), with the warrior-god, Pushkara Bharmā or Takshaka, the maker, the Greek *Arēs*, ruled the summer solstice,¹ and this appears to be the place assigned to their counterparts in the Cain genealogy. Mehujael, who holds the sixth place, means "smitten of God," and Methusael, like Methuselah, means "the husband of the goddess." These names both show traces, like that given in the legend of Lamech and in the age of Enoch in Gen. v., of the influence of the sun-worshippers, and thus the "smitten of God" must have a former deity who was like Mahalaleel, to whom he corresponds in the genealogy of Gen. v., a warrior-god, that is, he must have been the fire-god, the Greek *Ares*. While Methuselah, the husband of the goddess *Istar*, must have been originally the phallic god who was by those who worshipped the father as the head of the triad placed in the centre place formerly allotted to the moon-goddess. The place of Enoch in the genealogies in Gen. iv. and v. is also significant. In Gen. iv. Enoch, the beginner, comes immediately after the first three lunar months of the year represented by the Latin *Januarius*, *Februarius*, and *Mercedonius*, the wage-setter; the Hindu *Āditi*, *Diti*, and *Danu* (the strong man) and the Egyptian *Shu*, *Tefnet*, and *Set* (the phallic god of the evil principle), and thus represented the month of the vernal equinox in which the solar year opened, so that he was "the beginner" of the solar year, and also the beginner of the ten months of generation, which fulfil the promise of the present and prepare for the birth of the coming year. Again, in Gen. v. he occupies the seventh place, but this is assigned him to mark the beginning of the Egyptian solar year, which began after the summer solstice, and this would add another argument to those already adduced by Bunsen and others to prove that Seth, the germ of all mankind, in this genealogy is really the Set, the great snake, or god of the evil principle abhorred by the Egyptians. This assumption is,

¹ Part II. J.R.A.S. April, 1889, p. 320.

however, emphatically condemned by Ewald on linguistic grounds.¹

From the above review of some of the questions connected with these genealogies, it appears that Gen. iv. shows that a period of ten lunar months of generation and a full lunar year of thirteen months were looked on as the accepted official measures of time. But the mere statement of the fact does not prove how the great logical interval between a period of ten or eleven lunar months of gestation and generation and a year capable of being used as a continuous measure of time, like the year of thirteen months, was filled up. This change must have been made by astronomical observation, and it is the earliest record of the first conclusions formed by the early observers of phenomena, who looked to the heavens for the explanation of the mysterious changes of times and seasons, that we apparently find in the list of ten antediluvian kings of Babylon preserved by Berosus. The following is the list, with the number of sars and years during which each king is supposed to have reigned :

Name of King.	No. of Sars.	No. of Years.
1. Alorus	10	36,000
2. Alaparos	3	10,800
3. Amelon	13	46,800
4. Ammenon	12	43,200
5. Amegalaras	18	64,800
6. Daonus	10	36,000
7. Enedorachus	18	64,800
8. Amempsinus	10	36,000
9. Obartes	8	28,800
10. Xisuthrus	18	64,800
<hr/>		
Total	120	432,000

These sars, as measures of time, are composed of periods of 600 years, called ners, and six ners=one sar; therefore one sar=3600 years, and this multiplied by 120, the number of

¹ Ewald, *History of Israel*, 4th edition, edited by Martineau, vol. i. p. 264, note 2.

sars assigned to the reigns of the ten kings, gives a total of 432,000 years.

But this multiplication by ten was used by the Akkadians for the division of the circle. Thus they used to divide into 12×10 parts, or into $60 \times 2 = 120$, or the number of sars during which the ten kings reigned. If these 120 sars are divided into 360 degrees, the number in a circle, each sar will = 3 degrees. Each king's reign will thus stand for the following number of degrees:

1. Alorus	30
2. Alaparus	9
3. Amelon	39
4. Ammenon	36
5. Amegalarus	54
6. Daonus	30
7. Enodorachus	54
8. Amempsinus	30
9. Obartes	24
10. Xisuthrus	54
<hr/>	
Total	360

That this division of the circle into degrees is the true explanation of the numbers assigned to these several kings, is apparently proved by Ptolemy, who says that the Chaldeans used to divide each of the twelve signs of the circle of the heavens into ten degrees, each degree containing 60 minutes, and each minute 60 seconds. Thus $10 \times 60 \times 60 = 36,000 =$ one-twelfth of the circle, and $36,000 \times 12 = 432,000$.¹ So that the 432,000 years of the reigns of the kings represent a complete circle in the heavens, whether it be divided into degrees or seconds.

But if this was a circle in the heavens, it is clear that it must have been consisting of quite unequal parts, and that to mark the divisions of these points, stars must have been used, and that stars were the division, or junction-marks, the Hindu

¹ Ptolemy, *Tetrabiblos*, i. 32.

Joga-tāra, in this circle, is clear from the names of the first two. Assyrian scholars have long connected Alorus with Ailuv, a translation of the Akkadian Lu-nit, a male sheep, and hence Alorus has been identified with Hamul the ram, the first star in the constellation Aries. That the second King Alaparus is a star in the constellation Taurus is still more certain. Alaparus means "the divine bull of the foundation," from Akkadian "Alap," divine bull, and "Ur," foundation. The remaining stars have been identified by astronomical measurements, but the meaning of the names has not been determined.¹ It thus appears that this circle was, like that of the Chinese Sien, marked out into ten divisions at unequal intervals by ten stars, and it was with this instrument that the early Akkadians, like the Chinese, began to determine the positions and changes of heavenly bodies. The number ten must have been taken from the mother's year of ten months, and that Noah, who occupies the tenth place in the genealogy of Gen. v., is the same as Xisuthrus, is certain, because it was in the time of Xisuthrus, according to Berosus, that the deluge took place, and it was he who was saved in the Ark. Hence, if Xisuthrus is a concluding mark in a time circle, Noah in Genesis must probably represent a period of time. But when we turn from Berosus's account to that given in the deluge tablets found in the library of Assurbanipal, the identification of the Noah of Genesis with a period of the year is rendered still more certain. According to this account, it was Tammuz, the autumn sun, son of Ubaratutu, an Akkadian name meaning "splendour of sunset," who was warned by Hea-bani, the fish-god, the all-father of the Sumerians, of the coming deluge. By Hea's command he built a ship, which he coated inside and out with bitumen. When the sun-god, Samas, sent the rain which destroyed all life, Tammuz was saved by the ship and the seamen to whom he entrusted it. Now this story is exactly similar to that of Lamech, except that in Lamech's

¹ See the whole question discussed, and the list of the ten stars given, in the *Phænomena* or heavenly display of Aratus, done into English verse by Robert Brown, jun., F.S.A., Appendix II. pp. 79-80.

story he kills the autumn sun, and so kills himself as the god of the present year; but in the Deluge story Tammuz is saved to give life to the future year and to the race of beings to be born, who are purified by the sanctifying water. In both stories the natural phenomena referred to are the rains of the late autumn represented in the signs of the zodiac by Aquarius.

This investigation has, I would submit, now proved that the genealogies in Genesis each represented a year of thirteen lunar months, used to denote an epoch; that this year was calculated by observing the motions of the heavenly bodies, and that the motions of the moon, who ruled the year, were calculated by a circle in the heavens, divided into ten spaces, marked by junction stars. It must have been by means of this circle that the yearly motions of the moon were calculated, and that thirteen months were fixed on as the continuous measure of time.

Before proceeding further with the special questions raised by these genealogies, I must now, in order to ascertain more clearly how this change was made, turn to the evidence given in Indian records, and in the *Zendavesta*, as to the race which first adopted the full year of thirteen months, and who are represented in the genealogies of Genesis in the children of Lamech and Noah. Indian tradition, as I have frequently pointed out, makes Kaśyapa the framer of the lunar year. Kaśyapa is the ancestor of the Kuśikas or Kaśis, the Chitraratha of the *Rigveda*, the founders both of the sacred city of Kaśyapura or Multan, and of the still more sacred city of Kaśi or Benares. It was they who were the ancestors of one of the united tribes who ruled the most ancient Indian empire called that of Magadha. They are always spoken of as a Northern people, and their original home was in the Kabul country. The Indian Kaśyapa was the same as the Keresūspa of the *Zendavesta*, and the word "āspa" or horse in his name shows that he, like the Kuśikas, belonged to the people who called themselves the sons of the horse. He is described as "the sturdiest of the men of strength next to Zarathustra, for his manly courage."¹ He

¹ Darmesteter's *Zendavesta*, *Zamyād Yasht*, vii. 38, *Sacred Books of the East*, vol. xliii. p. 295.

is called also the son of Sāma, and also the fourth created man, the son of Thrīta, *i.e.* Thraētaona, the Trita Aptyā of the Rīgveda and Brāhmaṇas, who was the third,¹ and who is said to be the most helpful of the Sāmas. He is represented as the club-bearer "with plaited hair, and as the ringlet-headed bludgeon-bearing hero,"² like the Kaparddin of the Mahābhārata and the modern Śiva. He is said to have offered his sacrifice, that is, to have ruled in the valley of Pisanah,³ *i.e.* Pishin, south of Kabul, in the same country where the primeval capital of Pushkalavati, the Hastinapore of the Mahābhārata, stood. This was the country called Vačkereta, or the land of the evil shadows, the seventh land in the Zoroastrian cosmogony, and it was there he lived with Knātbaiti the Pairika, who was created by Angra Mainyu the evil spirit.⁴ This connection between Keresāspa and the Pairikas or wandering stars, the moon, the planets, comets, and other moving heavenly bodies, is also referred to in his conquest of the Gandarewa, "who were rushing with open jaws, eager to destroy the living world of the good principle."⁵ This is the same legend as is told in the Rīgveda of Kutsa, who is said by the help of Indra to have conquered the Gandharva.⁶ Now these Gandharva are in their earthly aspect the sons of Kaśi or Kaśyapa, the tribe known as the Gandhāri, the charioteers, whose home was in the Kabul valley. But in their heavenly aspect they are the charioteers of heaven, the planets, or wandering stars, as opposed to the fixed stars. Now throughout the Zendavesta the fixed stars are always looked on as the agents of the good principle,⁷ while the planets or Pairikas are the bad demons, against

¹ Mills, *Yasna*, ix. 10, *Sacred Books of the East*, vol. xxi. p. 223.

² Darmesteter's *Zendavesta*, *Fravardin Yast*, xix. 61, *Sacred Books of the East*, vol. xxiii. p. 124.

³ Darmesteter's *Zendavesta*, *Abān Yast* x. 37, *Sacred Books of the East*, vol. xxiii. p. 62.

⁴ Darmesteter's *Zendavesta*, *Fargard* i. 10, *Sacred Books of the East*, vol. iv. p. 7.

⁵ Darmesteter's *Zendavesta*, *Abān Yast*, x. 38, *Zamyād Yast*, vii. 41, *Sacred Books of the East*, vol. xxiii. pp. 63, 295.

⁶ Rg. viii. 1. 11.

⁷ Darmesteter's *Zendavesta*, *Rashn Yast*, xiv. *Sacred Books of the East*, vol. xxiii. p. 176, note 2.

whom Tistrya the dog-star fights,¹ and it is they who are described in the Bundahis as dashing against the celestial sphere and mixing the constellations.² They are in short the elements of disorder in the otherwise orderly celestial world.

From these various indications we can easily collect what must be very nearly an accurate account of the process by which the lunar year of thirteen months was reckoned. There were evidently among the ancient astronomical inquirers two parties, one living in the South of the Euphrates valley, the Sumerians, and the other the Akkadians or highlanders, whose rule extended to the countries of the North of India. The Sumerians were the people who first calculated the year by five seasons and by lunar months, and who worked out the year of gestation of ten months; but their observations were not made on a regular system; they trusted too much to unconnected observations of the movements of the moon and planets, and consequently they and the people who depended upon similar guides, like the ancient Jews who reckoned their year by new moons, were always at a loss how to estimate the passage of time. It was the Akkadians or highland races who first hit upon the idea of mapping out the heavens, and thus measuring the motions of the heavenly bodies, and calculating the time from these observations, and for this purpose they used the circle, in which they determined ten fixed points marked by stars, and they fixed on this number as that assigned to the lunar months of gestation, which was, till these observations began to be made, the only period of time to which any certainty was attached. It was these people who conquered the Sumerians, or the mother-worshipping Turanians. The contest between the two races is referred to in the Zendavesta, where Keresāspa is said to have offered his sacrifice to the wind-god by the Gadha or channel of the Rangha or Tigris, to avenge the

¹ Darmesteter's *Zendavesta*, *Tir Yasht*, v. 8, *Sacred Books of the East*, vol. xiii. p. 96, where Tistrya is called "the glorious star that afflicts the Pairikas, that vexes the Pairikas, who, in the shape of worm-stars, fly between the earth and the heaven."

² West's *Pahlavi Texts*, *Bundahis* iii. 26, *Sacred Books of the East*, vol. v. p. 19.

death of his brother Urvākhshaya, who was slain by Hitaspa the Gandarewa, who lives beneath the waters.¹ Urvākhshaya is described in the Yasna as a judge confirming order,² and the Gandarewa, who lives beneath the waters, are the people who took to the planets and wandering stars as guides for the measurement of time, but which really, when uncontrolled by observation, disturb the heavenly order. It was this disordered system of calculation which was said to be victorious when Urvākhshaya, the judge who maintained order, was slain. It was, therefore, as a reformer, that Keresāspa used the power obtained by his conquests, and his object was to restore order by the maintenance of well-organized government on earth, and by the intelligent use of heavenly bodies as indicators of time. By observing and measuring their motions on the stellar map, formed by the circle with its marked stars as guide-stones, he traced out the annual course of the moon, and made the months coincident with the seasons, and in thus making the lunar year of thirteen months the measurer of the year, he made the moon-goddess, called the Pairika Kñathaiti, the ruler of continuous time, as she had been hitherto the ruler of the disconnected months and of the sacred period of gestation.

But in order to trace the career of the sons of Kaṣ still further, we must turn to the Bible. We there find the Hindu Kaṣyapa called Nimrod, the son of Cush, a name exactly the same as the Hindu hero. He also, like his Indian prototype, was a great builder of cities, for he built Babel, Erech, and Akkad, as the Indian Kuṣ built Pushkalavati, Multan, and Benares, and thence went into Assyria. The connection of Cush with India is further proved by the

¹ Darmesteter's *Zendavesta*, Rām Yasht, vii. 28, *Sacred Books of the East*, vol. xiii. p. 255. Can Hitaspa mean the Hittite horseman? The Hittite empire in early times certainly extended as far as the Tigris, and it may, to judge by the constant intercourse which undoubtedly existed between the scattering people of the Hittite coasts in Palestine and Asia Minor, have once extended over the whole of the Euphrates valley, that is, the country must have been ruled by tribes of kindred origin, all worshipping the mother earth. It was probably the invasion and conquest of the Tigris and Euphrates country by the Northern Akkadians which broke up the continuity of this wide-spread confederacy.

² Mills, *Yasna*, ix. 10, *Sacred Books of the East*, vol. xiii. p. 234.

fact that Havilah was one of the sons of Cush,¹ and Havilah, in the second chapter of Genesis, is the land which is watered by the River Pishon, where there is gold, bdellium, and the onyx-stone. Havilah must be India,² and the River Pishon must be the Indus, which is here called after the name of the valley of Pisanah, or Pishin, in the kingdom of Keresāspa. It was these people who, as we know from the Indian traditions, calculated the lunar year of thirteen months, and it is these people who are both mechanics and handicraftsmen as well as warriors. It was by applying to the heavens the same system of measurement which they used as carpenters and builders that they were able to calculate the years upon the heavenly circle marked by the stars. They are in Genesis represented by Tubal-Cain and Cain, the father not only of those who make destructive weapons, but of all those who built inland cities³ and worked in copper and iron. It was they who took away the moon from among the aimlessly wandering stars, and subjected her motions to rule, and she was the Kāthaiti, the Pairika who, according to the Vendidad, clave to Keresāspa.⁴ The description of Keresāspa in the Yaṣts as the club-bearing hero of the plaited hair shows that he was the representative of Śiva, and hence we find Śankara or Śiva ruling the lunar year, it having been invented by the worshippers of the linga and material fire-stick, the earthly fire. The connection between the Kaśis, or Kusikas, and the Indra-worshippers appears both in the Zendavesta and in the Rīgveda, for in the one Keresāspa is, as I have shown, the son of Thraētaona, the Mazdean Indra,

¹ Gen. x. 7.

² Or at least that part of India which forms the northern region watered by the Indus. Ophīr is probably the southern part. Franz Delitzsch on Genesis, Clark's Foreign Theological Library, new series, vol. xxxvi. pp. 92, 94, and xxxvii. p. 129, shows from Gen. xxi. 17 that Havilah is to the East of the Persian Gulf, touching Arabia on the West. The sons of Ishmael are there said to dwell "from Havilah unto Shur, that is before Egypt as thou goest towards Assyria," and identifies the people of Havilah and the sons of Joktan, who dwell in the hill-country to the East (Gen. x. 26-30) with the Χααλαραια, whom Strabo (xvi. 4. 2), quoting Eurythemos, places between the Nabathæans of Arabia and the Agræans.

³ Maritime cities, and cities near the mouths of navigable rivers, had probably been built before by the mother-worshippers.

⁴ Darmesteter's Zendavesta, Fargard, i. 10, Sacred Books of the East, vol. iv. p. 7.

while in the other, Kutsa, the conqueror of the Gandharva, or Gandarewa, is the charioteer of Indra. But the statement in the Yasna that Keresāspa is the fourth man, and the son of Thraētaona, the head of the third race, is an inversion of the order set forth in the history of all other nations. It was Keresāspa, Tubal-Cain, and the Indian Kuṣikas, who represent the handicraftsmen and charioteers, who were the first opponents of the snake; and it was Thraētaona who finally destroyed the great snake Aži-Dahāka, and appropriated his wives, Savanghavāch and Erenavāch. This fourth race is in the Biblical genealogies represented in the male and female lines by Naamah, the beautiful, the graceful, the Greek Aphrodite who rose out of the waters, and by Noah in the male line. Noah means the comforter, and it was he who was regarded by the Semites as the ancestor of the regenerate race which succeeded the Flood, and who always looked to the father as the only ancestor worth mentioning. This genealogy in Gen. v. is evidently copied from the earlier genealogy in Gen. iv., Seth and Noah being substituted for Eve, Adah, and Zillah. Whether Seth, or Sheth, is or is not the Egyptian snake-god Set, as Bunsen affirms and Ewald denies, his name means the "germ," or "scion," while Enos is merely another name exactly equivalent to Adam, both meaning "the man"; and these two names have absolutely no history attached to them. On the other hand, Cainan occupies a very important position, as is shown by the reference to him in the song of Lamech, where it is said, "If Cain shall be avenged seven-fold, surely Lamech seventy and seven-fold."¹ The collocation of figures set forth in this threat appears again in the numbers of years of the lives of the patriarchs in Gen. v. They are as follows:—

Adam	130 + 800 = 930	Jared	162 + 800 = 962
Seth	105 + 807 = 912	Enoch.....	65 + 300 = 365
Enos	90 + 815 = 905	Methuselah	187 + 782 = 969
Cainan ...	90 + 840 = 930	Lamech ...	182 + 595 = 777
Mahalaleel	65 + 830 = 895	Noah	600 + 350 = 950

¹ Gen. iv. 24.

In this list the 910 years of Cainan's life are exactly seven times 130, the number of years Adam lived before Seth was born; while the 777 years allotted to Lamech looks very the seventy and seven-fold of the poem. The 130 years that Adam lived before Seth was born are also apparently significant, as it seems that they refer to the years of thirteen and of ten months, and thus make the pure race, of which Seth was the progenitor and Noah and his offspring the descendants, to begin after the wicked races who worshipped the mother earth, and the phallic god, had been destroyed, and their modes of reckoning time displaced by the solar year. In the story of the Flood the solar reckoning of time is distinctly used, as it was on the first day of the tenth month, that is, after the nine solar months of gestation had passed away, that the tops of the mountains appeared out of the waters.¹ Unfortunately the remaining enigmas concealed in these numbers are not so easy of detection as those in the corresponding list of Babylonian patriarchs, and the only item which corresponds with the Babylonian notation is the age of Noah before the Flood—600 years—which seems to represent a Babylonian *Ner*.

When we come to deal with the third genealogy, we find that it begins the history of the Semites, the descendants of Shem, meaning "the name." This was the people who worshipped the one ineffable God, who embodied all the attributes attached to the Deity by previous seekers after truth. It is these Semites who are apparently connected with *Keresāspa*, for we find him called the son of *Sāma* in the *Yasna* and *Yasts*. At any rate Genesis records an emigration of Semites to the East, for Joktan, the son of Eber, the fifth in descent from Noah, had thirteen sons,² among whom are Ophir and Havilah, names which evidently refer to India, Havilah meaning the north country, and Ophir that of the western ports, and the former name also connects the Semites with the Cushites or *Kuṣikas*, as Havilah is also a son of Cush.³ But this Eastern Semitic emigration seems to have taken place at a late period, for the whole Semitic gene-

¹ Gen. viii. 5.

² Gen. x. 26.

³ Gen. x. 7.

alogy is, as Ewald has shown, a list of the countries they successively inhabited, beginning with Arphaxad in Armenia, and ending with the Euphrates valley, represented by Nahor, the river, or the great snake. The evidence that I have now brought forward seems to me to go very far towards proving conclusively the very early existence of the lunar year of thirteen months, and to show that this was worked out by astronomical observations made by the sons of Kus, who added two months to the longest unit of time previously reckoned, the eleven months of the Rudras, or Cainites, which was again founded on the period of gestation of ten lunar months. But the history of this early year cannot be considered complete till the change in the number of seasons, consequent on the introduction of the full lunar year, is explained. In the original year, reckoned before the ten months of gestation were consecrated, there were five seasons, and it was the reduplication of these, so as to make a productive pair, which apparently first led to the adoption of two months as the duration of a season, called by the Hindus "ritu." These five "ritus" made up the time of gestation, and it was probably from a combination of the connection formed by observations of recurring years with astronomical calculations that the sixth season, or ritu, of two months was added to the eleven. At any rate, the Brāhmaṇas tell us that the Pitarah Somavantah, the moon-worshippers, recognized six seasons, and there are six seasons recognized in the Yasna Visparadā and Āfri Nagān, which, except the five Gāthas, are the oldest parts of the Zendavesta. They are there called, 1. Maidhyō Zaremaya, the milk-giver; 2. Maidhyō-shema, the pasture-giver; 3. Paitiṣbahya, the corn-giver; 4. Ayāthrima, the breeder; 5. Maidhyāirya, the cold; 6. Hamaspath Maēdhaya, the special time for ritual deeds.¹ In the Bundahis these are reduced to four, and three months are assigned to each season, and Maidhyairya is said to end on the day of the winter solstice, the twentieth day of the month Din, when Hamas-

¹ Mills, *Yasna Visparad*, i. 2, *Yasna*, i. 9, *Sacred Books of the East*, vol. xxxi. pp. 335 and 198.

path Maëdhaya begins,¹ and it lasts till the vernal equinox. When there were six seasons and thirteen months in the year, one of the seasons must have had three months and the rest two. Hamaspath Maëdhaya, the special time for ritual deeds, must have ruled the year, and included the great new year's festival and the Hindu women's festival of the Huli in February, with the festivals of the Dionysia at Athens, and the Lupercalia Matronalia and great new year's festival at Rome. This season must have lasted from about the 21st of December to the 15th of March, and the others must have followed in regular order. Maidō-zaremaya up to the 11th of May. Maidhyoshema, the summer, up to the 6th of July. Paitishahya up to the 31st of August. Ayuthrima up to the 26th of October, and Maidhyairya up to the 21st of December. This would make Ayuthrima, the season specially dedicated to ancestors, agree exactly with Aivisrūthrima in the older arrangement of the five seasons, which was sacred to the Fravashis, the mothers, and to Verethragna, the phallic god, the father.

It thus appears that the third question should be answered as follows : The first years, or rather periods of time measured by months, which succeeded the year of five seasons, were the periods of gestation and generation of ten lunar months first, to which an eleventh was added. That when the heavens were mapped out into marked divisions, it was found possible, by measuring the motions of the moon, to introduce a permanent measure of time more accurate than that given by the recurring seasons and the unregulated months, and that thus the first full year of the thirteen lunar months was determined, and that then the seasons, which had been hitherto reckoned as five, were increased to six.

I have now come to the fourth question proposed for solution. *When did the original year begin?* I have already shown that in the case of the Hindu year there can be no doubt whatever that the year began with the winter solstice dedicated first to the great mother Tai, called Taishya in the Brāhmaṇas, and

¹ West's *Bundahis*, xxv, 3-6, *Sacred Books of the East*, vol. v. pp. 91-93, note 2.

afterwards to the bull-god Pūsh. The Roman year also certainly began at the same time; and though the Athenian year in its latest form began, like the Egyptian year, at the summer solstice, there can be but little doubt that it originally began with the winter solstice, like the Bæotian, Delphic, and Bithynian years.¹ The evidence as to the beginning of the Delphic year is conclusive as to the customs of all the Grecian states who acknowledged the supremacy of the Delphic god, while the Bæotians were the most ancient and conservative of the Greek races. The Bithynians were a people of cognate race to the Thracians,² and the fact that they began their year with the winter solstice proves that the custom passed over from Asia to Greece. But this year, which appears to have been universally used throughout the ancient world, could never have been a solar year, as from the very beginning this year has always been based on the Zodiacal circle, which starts from the time of the vernal equinox. Therefore the year beginning with the winter solstice must belong to an earlier system, which can only be that which reckoned time by the lunar year of thirteen months.

This year was, as I have shown, most probably calculated from a circle coincident with the celestial equator, which originally was marked by ten stars,³ but it is certainly most probable that the people who had found the value, for purposes of comparison, of a circle of ten points, would, when there were thirteen separate measures of time, have increased the divisions of the circle to thirteen. When the discovery that the sun ruled the year was made, and when it was found that the path of the sun was not coincident with the equator, it was necessary to alter the position of the heavenly circle;

¹ Lewis, *Astronomy of the Ancients*, p. 30, quoting K. F. Herman's *Griech. Monatskunde*, pp. 122-3.

² *Encyclopædia Britannica*, ninth edition, vol. iii. p. 793, sect. Bithynia.

³ This was the first circle used for computing time exceeding a month. The daily positions of the moon in her monthly course had probably, as I have before shown, been noted in the lunar circle of twenty-eight stars, afterwards increased to thirty. But the scholars who are now studying Akkadian astronomy will probably shortly solve these and many other questions connected with early astronomy. A book about to appear, called *Babylonische Kosmologie*, by Jonson P. Strasburg (Trübner), will, I hope, prove a great deal, and will certainly, I am told, give an earlier list of zodiacal signs than that I have used.

but there is no evidence to prove that this change caused any great disturbance or commotion. When a change was to be made affecting the reckoning of time, which was so politically important, minds imbued with the spirit of ancient conservatism would make every effort to make the change in such a way as would raise no religious or fanatical prejudice, and therefore they would naturally, while altering the position and numbers of the stars of the heavenly circle, try to preserve in it the names of the old months which were before given to its distinguishing points. Now in three of the oldest list of months which are recorded—the Egyptian, Hindu, and Pahlavi—we find the bull-god or the mother occupying the first place. In the Egyptian year the first month is Thoth, a name of the bull-god Osiris. In the oldest form of the Hindu year Tai, the mother, and in the latter Pūsh, the bull-god, rules the opening month, while in the Pahlavi year the first month is Fravardin, dedicated to the Fravashis, or mothers.¹ Among the Akkadians the bull was always considered to be the god who guides the year, and the moon-god Bel was the original Gudana, the bull of heaven, whose title, when transferred to the sun-god, was changed into Gudibir, the bull of light.² It is therefore antecedently probable that in changing the old equatorial circle into the ecliptic, the authors of the change would use, where possible, the old names, and that they therefore transferred the bull of the winter solstice, who had replaced the mother earth in the list of months, to the vernal equinox. If we retransfer the signs of the Zodiac to their original position in the lunar calendar, we shall find that they give a much better ideal picture of the changes of the year than they do when Taurus is placed as the first month coincident with the vernal equinox.

This will be much clearer if we begin by comparing the earliest list of the signs of the Zodiac taken from the Akkadian tablets with the lists of Akkadian months.³

¹ West's *Bundahis*, xxv. 20, *Sacred Books of the East*, vol. v. p. 97.

² Sayce, *Hibbert Lectures for 1887*, pp. 48, 163; Part III. *J.R.A.S.* July, 1886, pp. 642-643.

³ I have to thank Mr. Benson, of the Assyrian Department of the British Museum, for this information, which he most kindly gave me. I have also taken some of the names from a list by Dr. Sayce.

¹ Akkadian Months.	² Meaning.	³ Akkadian Signs of the Zodiac.	⁴ Meaning.	⁵ Ordinary sign.
1. Khas-sidi	The bull of increase	1. Tete	The bull	The bull
2. En Ga or Munga	The making of bricks	2. Mas-masa	The twins, or the bricks	The twins
3. Su-gal-na	The seizer of seed	3. Nungaru	The crab, the seizer of seed	The crab
4. Ne-ne-gar,	Fire making fire	4. A	The lion, or water	The lion
5. Gin-nini- na, Ki-gingu- na	The errand of Istar	5. Ki	The earth	The virgin
6. Dul-azag, Tul-ku	The pleasant hill, The holy altar	6. Nuru	Light	The balance
7. Bin-ga-a	Crowned chest (of the the body) Mouth opposite the foundations	7. Agrabu	The scorpion	The scorpion
8. Gan-gan- na,	The very cloudy	8. Pa	The sceptre	The archer
9. Ab-ba-e	The cave (of the rising sun)	9. Shuhu	The ibex	Capricornus, or the sea- goat.
10. As-san	The curse of rain	10. Gu	The dog?	The water- ing pot
11. Se-gin- dar, Se-kesil	Se = win, dar = cutting Sowing of seed	11. Zeb	Meaning not known	The fishes
12. Sā-se- gen-dar Se-dai	The cloudy Segundar The dark month of sowing	12. Ku	The ram	The ram
13. Bara-zig- gar	The altar of the demi- urge.			

Now to begin with the last sign, which is a perfect epitome of ritualistic history. The ram, which in Tamil is Mesham the goat, evidently is the victim sacrificed on the altar of the demiurge, or creator. It is a reproduction of the myth of Jantu in the Mahābhārata, where the king sacrifices to secure increase of offspring; and of the sacrifice of Isaac by Abraham, only in the sacrifice of Abraham, as in that of Phrixos, in the story of the Argonauts, the sacrifice of the ram is substituted for that of the human victim. It is the sacrifice of the old year, which is by its blood poured out to secure the fertility of the next. But this original sacrifice was

offered to the mother earth, the Hindu Kadrū, who ruled the last month of the Indian lunar year, whereas the Akkadian altar was the stone or brick altar, the representative of the phallic god, the father, and it was to this god that the goat was offered which became, under the rule of the sun-worshippers, the ram, which was always a solar animal. We thus see that the Akkadian god of the altar, the male father, ruled the close of the year, just as Sankha, or Śankarā, the Hindu Rudra, ruled the winter solstice.¹ If the month represented by the last sign of the Zodiac before Taurus is taken to be the month ending with the winter solstice, the altar and the sacrifice have a most significant meaning; whereas if it represents the month before the vernal equinox, it has no apparent connection with the course of the year. Again, the evidence that the bull or cow represented the first month of the year beginning with the winter solstice is very strong. In the *Manu* legend, which represents the birth of a new year as well as of a new earth, it was Idā, both the sacred cow and the mother earth, who rose out of the waters. Āditi, the opening Hindu lunar month, means the mother earth as well as the beginner, and Tai, the Tamil mother, was originally the mother earth, who probably, like Idā, became afterwards the cow. As for her successor, Pūshya, he was certainly preceded by the goat, for in the *Rigveda* he is called the god drawn by goats.² This goat was the Tamil sign of the Zodiac Mesham, who was the animal sacred to the fecundating power which was to make the new year fruitful. In the original Athenian year it was the Grecian Pūshan, the god Poseidon, who ruled the time of the winter solstice, which happened in Poseidon, the month sacred to him, and he, like Pūshan, was the god of the black bull, to whom bulls were sacrificed at Ephesus.³

The second month, represented among the Zodiacal signs

¹ Alberuni's *India*, Sachau's edition, vol. ii. chap. lxi. vol. ii. pp. 118-120. Sankha is shown in the list of snake-gods given as ruling the year to represent Sankha. See Part II. J.R.A.S. April, 1889, p. 320.

² *Rg.* vi. 55, 4, vi. 67, 3.

³ See Part IV. J.R.A.S. April, 1890, p. 143. Poseidon fell in the latter half of December and the first half of January.

by the twins on the bricks, clearly consists of two symbols. If these were taken from the lunar calendar, they must have represented two months. In the Hindu Zodiac the twins are a boy and girl,¹ and in the representations of the Assyrian signs they appear as two male figures.² But the evidence given by the names of the second and third months in the lunar series seems to show that they originally represented the two sexes. In the *Mahābhārata* the name of the second lunar month is Diti, who is the mother of the Daityas; and again, Māgh, which probably was originally a lunar month, is, as I have already shown, almost certainly a female goddess, and to the evidence I have already brought forward to prove this, I may add that in the list of *Nakshatras* *Maghāh* is feminine. On the other hand, the third lunar month in the Hindu list is evidently masculine, as Danu is the putative father of the Turanian race called *Dānus* in the *Zendavesta*, and *Dānava* in the *Mahābhārata*. As it was one of these months which was usually inserted as an intercalary month when an additional month was required to correct the errors of the solar calculations, it must have been one of these two months which was left out when the thirteen months were reduced to twelve. It was after February that the Romans inserted their intercalary month *Mercedonius*, and after *Poseidon* that the Athenians inserted theirs. The reduplicated Hebrew month *Va-adar* was inserted after *Adar* in the embolismic year in order to secure the observance of the Passover on the right day, the full moon of the month of *Nisan* at the vernal equinox,³ and this practice must have originated with the reduplicated month in the Akkadian list I have quoted, *Se-gen-dar* and *Sā-se-gen-dar*. Further evidence that the month represented by the twins was formerly a pair representing the mother and father, is given in the Athenian name of the second month, *Gameliōn*, or the marriage-month. It was to form this month that two lunar

¹ Alberuni's *India*, Sachau's edition, vol. i. chap. xix. p. 219.

² *Law of Cosmic Order*, by Robt. Brown, jun., F.S.A. (Longmans, 1882), Appendix, p. 80, No. xiv.; also Lagard, *Culte de Mithra* (1847), pl. xxvi.

³ *Encyclopædia Britannica*, Art. Calendar, vol. iv. p. 678.

months were married and formed into one.¹ This marriage was symbolized in the Akkadian Zodiac by the bricks which were put together to make the permanent month. When we recollect that in the Hindu sacrificial ritual everything is done in pairs, we can see how the most natural way of making the change required in the years seemed to amalgamate one of the pairs of the month into a single month. Further evidence connecting the twins with the lunar year of the sons of Kuṣ, or Kaśyapa, is given by the connection that I have already shown to exist between the heavenly twins, or horse-men, and the northern charioteers of India.

Further evidence as to the truth of this explanation is given by the Hindu name of the sixth month, Jyestha, corrupted into Jeth. This, according to the present hypothesis, was formerly the seventh month. It means the eldest, or chief. This is a name which is most appropriate for the month which is sacred to the sixth, formerly the seventh, sign of the Zodiac Nuru, the light, in the Akkadian list which, according to Varāhamihira, appeared in the Hindu Zodiac as "fire."² This was the month which was formerly sacred to the moon which ruled the summer solstice, and which in the great cosmological hymn of the Rigveda is represented as being the seventh month, the self-produced, standing in the midst of the six pairs of months.³ In the Hindu lunar list she appears as Krodhā, the ancestress of the warrior moon and snake races, who were hateful to the Aryans and Northern tribes.

The eighth Akkadian sign, Pa, the sceptre, and its counterpart, Dhamsu, the archer, both represent the ruling power, and fully justify the name of the Hindu month Srābon, which means the glorious month.

But one of the clearest proofs of the identity of the signs as I have arranged them, and the Hindu months they represent, is that given by the Akkadian Shuhu, the Ibex, later the Tamil Makaram, or sea-monster; and last of all, Capri-

¹ This was also symbolized by the *ἑρπυρία* of Zeus and Here which was celebrated at Argos, in Gamelion. See Part IV. J.R.A.S. April, 1890, p. 450.

² Alberuni's India, Sachau's edition, chap. xix. vol. i. p. 219.

³ Rg. i. 161. 12. See above, pp. 572, 573.

cornus. This animal was, as Alberuni tells us, represented by the Greeks as a goat with a fish's tail.¹ The names of the corresponding Hindu months are Bhadrapada, meaning the "blessed-footed," and Proshthapada, meaning the "ox-footed" month, but the dominant deity of the month is Ājākapād, the one-footed goat,² agreeing exactly with the Zodiacal sign of the sea-goat with its fish's tail,³ which was its one foot. Again, Mesham, the Tamil twelfth, formerly the thirteenth sign, meaning goat, agrees precisely with the name of the present twelfth and former thirteenth Hindu month, Mirga, or Mārgasirsha, which means the "deer-headed animal." This was the gazelle, formerly sacred to the Akkadian chief phallic god Mul-lil, represented in the Akkadian months by Bara-ziggur, the altar of the Creator, which was afterwards altered first to the goat, and next to the ram.

The above explanations will be made more clear by the following table, in which I have placed the Hindu months side by side with the signs of the Zodiac they represent when the Zodiacal year is reckoned as beginning with the winter solstice, making December-January the first month :—

Name of Hindu month.	Akkadian sign of Zodiac.	Ordinary Zodiacal sign.
1. Pūshan	Tete, the bull	The bull
2. Māgh	Masmasa, the twins, or the bricks	The twins
3. Phalgun	Nungaru, the crab, the seizer of seed	The crab
4. Chait	A, the lion, or water	The lion
5. Baisakh	Ki, the earth	The virgin
6. Jeth	Nuru, the light	The balance
7. Assār	Agrabu, the scorpion	The scorpion

¹ Alberuni's India, Sachau's edition, vol. i. chap. xix. p. 219. Varāhamihira also calls it Makara, and translates it "hippopotamus," but Alberuni corrects him.

² Alberuni's India, Sachau's edition, vol. ii. chap. lxi. p. 122.

³ He is the fish-man called by Berosus Oannes, which is the equivalent of the Akkadian Hea-ana, the god (ana) Hea or Ea, who arose from the sea to impart civilisation and knowledge to the Euphratean populations. His earlier form was the goat, or ibex. It was the worshippers of the sanctifying water of life who assimilated him to the fish.

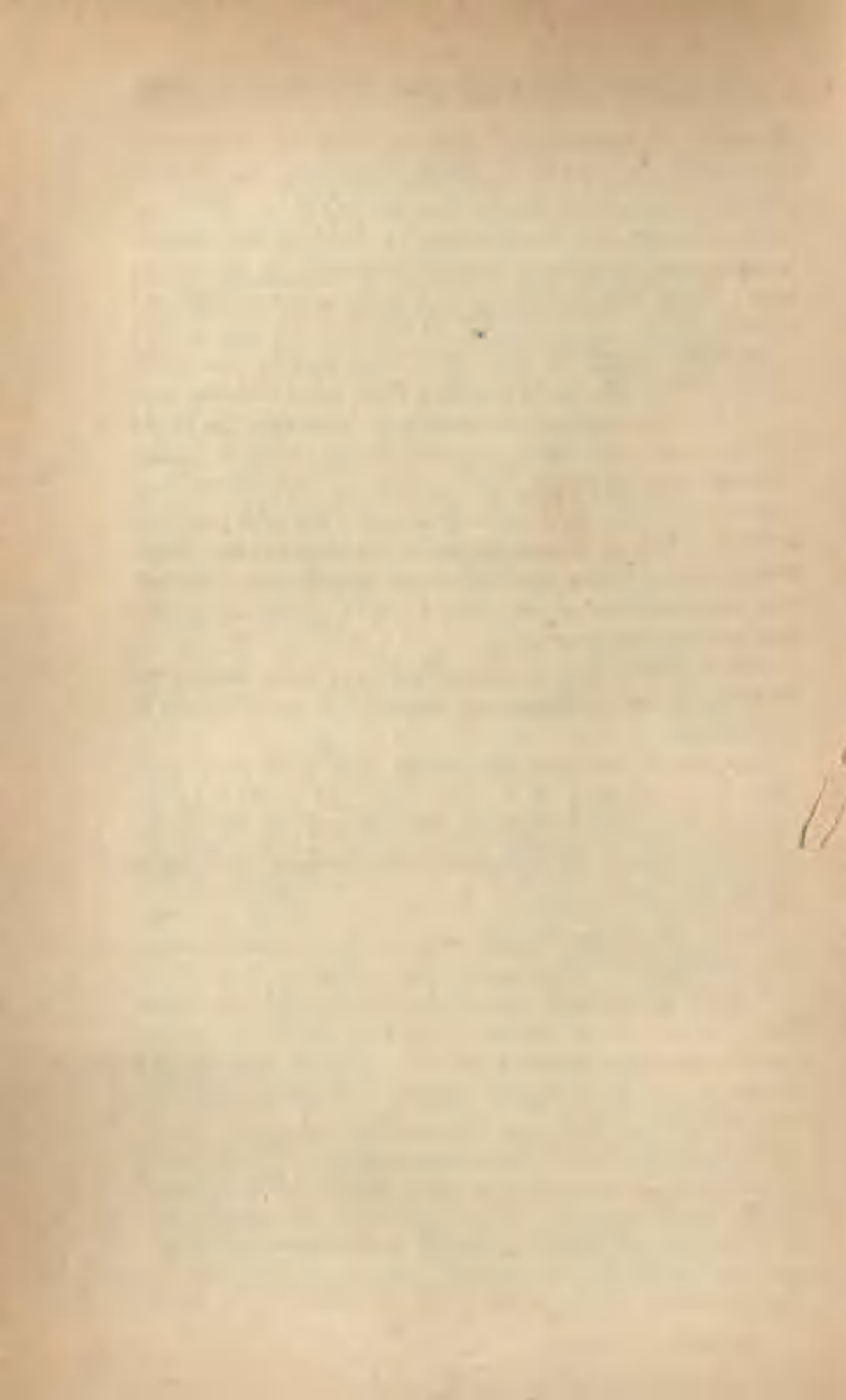
8. Srābon	Pā, the sceptre	The archer
9. Bhādon	Shuhu, the ibex	Capricornus, the sea-goat (Makara)
10. Asvin	Gu, the dog?	The watering-pot (Aquarius)
11. Khartik	Zeb, meaning unknown	The fisher
12. Margasirsha	Ku, the ram	The ram, or the goat.

It has thus been shown that the year everywhere originally began with the winter solstice, but certain nations altered this original custom. Thus the Egyptians, who were imitated by the Athenians, began their year with the summer solstice, because this period nearly coincided with the rising of the Nile, which was the most important event of the Egyptian year. Others, again, like the Spartans and the Peloponnesian States, the Macedonians and the States of Asia Minor, began their year with the autumnal equinox.¹ This change was made under the influence of Tammuz worship, and, as I have already pointed out, the Song of Lamech in Genesis iv. gives evidence of a similar change having been made in the reckonings followed by the Biblical chronologists. But Tammuz worship was essentially a solar cult, and must have been long posterior to the lunar year except in its original form of earth-worship. I have now completed the inquiry on which I started, and have, I hope, given what will be accepted as a fairly accurate proof of the processes by which the solar year was evolved from the earliest year of five seasons. The first stage towards reckoning time, following the division of the year into five seasons, was that made by the calculation of the lunar month into twenty-eight days. These were divided into two periods of fourteen days each, representing the phases of the moon; but these phases, the Hindu Nakshatra, were not used as a measure of annual time till the Hindu five years' cycle, reconciling the solar and lunar year, was calculated. The first period beyond the month recognized as a stable unit of time were the ten lunar months of

¹ Lewis, *Astronomy of the Ancients*, chap. i. sect. 6, p. 29.

gestation, subsequently increased to eleven by the addition of a month in honour of the earthly father; but the complete year of thirteen lunar months was not calculated till a map of the heavens had been framed by dividing the celestial equator into ten unequal divisions characterized by selected stars. From the tables thus formed, measurements and calculations of the movements of the heavenly bodies were made, from which the year of thirteen months was determined, and to this circle probably three more divisions were added when the thirteen lunar months were fixed on as the period of the year. This year always began with the winter solstice. From the signs used to denote the circle by the lunar astronomers, those used by the founders of the solar year were selected. Two of these signs, which were first the two sacred fire-sticks, and afterwards the husband and wife, were made into one, representing first the pair of bricks, afterwards the boy and girl, and last of all the male twins; and it was the month that was thus discarded that was again re-inserted when an intercalary month was required to correct errors in calculation.

But subsequent perturbations in this order were made when the beginning of the year was fixed at the autumnal equinox, as among the Tammuz-worshippers; in the summer solstice, as among the Egyptians and Athenians; and, lastly, by the solar year.



ART. XI.—*The duty of English-speaking Orientalists in regard to united action in adhering generally to Sir William Jones's Principles of Transliteration, especially in the case of Indian Languages; with a Proposal for Promoting a Uniform International Method of Transliteration so far at least as may be applicable to Proper Names.* By Sir MONIER MONIER-WILLIAMS, K.C.I.E., D.C.L.

BEFORE entering on the subject of Transliteration, I propose to submit a few preliminary remarks on the formation of graphic systems generally, and the rules which ought to regulate their application.

The following rules or principles will, I think, be accepted by most scholars in the present day:—

General Alphabetical Rules.

1. In each graphic system each vowel-sound should invariably be represented by the same vowel-symbol and by no other; *e.g.* the sound of *a* in 'zebra,' 'organ,' 'cedar,' should always be represented by the symbol *a* and not sometimes by *u* as in 'gun,' or by *o* as in 'son,' or in any other way (see artificial sentences given at p. 612).

2. Each consonantal sound should invariably be represented by the same consonantal symbol and by no other; *e.g.* the consonantal sound of *j* in our word 'jib' should always be represented by the symbol *j* and not sometimes by *g* as in 'gibbet'; and again, the sound of *s* should always be represented by *s* and not sometimes by *c*; and the sound of *k* by *k*, and not sometimes by *c*, as in the words 'cinder,' 'kind,' 'cicatrise.'

3. Each *simple* sound should be represented by a single symbol. This rule should apply to the sound represented by *c* in the Italian 'civita,' 'dolce,' but represented by *ch* in our

'chisel,' 'church,' and by *tach* or *tch* in German and French transliteration of Indian words. (Note; it is difficult to get rid of the prejudice that our sound of *ch* is an aspiration of *c*, but that it is not so is proved by the fact that it has an aspirated form; see Nāgarī alphabet, next page).

4. *Aspirated* consonantal sounds should in strictness be represented by single symbols or by some mark of emphatic breathing or by some modification of the unaspirated consonant, and not by adding another distinct letter such as *h*; e.g. the aspiration of *t* should be represented by a single symbol, as in the Greek *θ*; or by adding a mark as in *t'* or *t'* or *t'*; or as in Anglo-Saxon *ð* for *dh*. (Note, however, that the Latin method of adding *h*, as in *theologus* for *θεολόγος*, *philologus* for *φιολόγος*, is now, in my opinion, too universally practised to be set aside.¹)

I next pass to certain actual alphabets, and begin with the Nāgarī or Deva-Nāgarī alphabet of India, as more complete, and as conforming more nearly than any other to the above rules. It is provided with 47 simple symbols (14 vowels and 33 consonants), and, to make a fount of types complete, there should be provision for about 500 compound consonants.

This alphabet, thought to have borrowed some of its forms from a Phœnician source,² was developed through the gradual expansion of the symbols used in the Southern Aśoka inscriptions, written in a kind of Prākṛit or Pāli, but was probably not thoroughly fixed in its present shape till about the twelfth century of our era. The equivalent letters, here added, are those of the second edition of my Sanskrit-English Dictionary, published by the University of Oxford. It is, however, a mistake to suppose that the Nāgarī is peculiarly a Sanskrit alphabet; for the Sanskrit language, though it has adopted the Nāgarī, may also be written in Telugu, Kanarese, Malayālam or Grantham letters.

¹ I have arrived at this conclusion since writing my papers on transliteration for the Berlin and Leiden Congresses in 1881 and 1883.

² Of the Indian Inscription characters those called the Southern Aśoka—from which the Nāgarī was derived—are not, we know, so clearly traceable to a Phœnician source as the Northern, and some hold that the Nāgarī had its origin in Southern India, or at any rate that some of its symbols are original.

THE NĀGARĪ ALPHABET.

Vowels.

अ a, आ, ī ā; इ, ī ī; उ, u, ऊ, ū; ए, ī ī; ऐ, ī ī; औ, ī ī; ओ, ī ī; औ, ī ī.
(अ, ī ī, ऐ, ī ī), ए, ī ī; ऐ, ī ī; औ, ī ī; औ, ī ī.

Anusvāra ' n or m; Visarga : h; Virāma '.

Consonants.

Gutturals, क k, ख kh; ग g, घ gh; ङ ṅ.

Palatals, च c, छ ch; ज j, झ jh; ञ ṇ.

Cerebrals, ट t, ठ th; ड ḍ, ढ dh; ण ṇ.

Dentals, त t, थ th; द d, ध dh; न n.

Labials, प p, फ ph; ब b, भ bh; म m.

Semiconvexels, य y, र r, ल l, व v.

Sibilants, श ś, ष sh, स s.

Aspirate, ह h.

Compounds, क्ष ksh and about 500 others.

Secondly, I give the Hellenic or Greek alphabet—known to be from a Phœnician source¹—arranging it (as far as is possible without palatals and cerebrals) in the same order. It has only twenty-four simple symbols and two compound; but has both capital and small letters (reckoned as one) thus:

THE HELLENIC, OR GREEK ALPHABET.

Vowels.

A, α; E, ε; H, η; I, ι; T, υ; O, ο; Ω, ω.

Consonants.

Gutturals, K, κ; X, χ; Γ, γ.

Dentals, T, τ; Θ, θ; Δ, δ; N, ν.

Labials, Π, π; Φ, φ; B, β; M, μ.

Semiconvexels, P, ρ; Λ, λ.

Sibilants, Σ, σ, ς; Ζ, ζ.

Aspirate, (spiritus asper) ' (lenis) '.

Compounds, Ξ, ξ; Ψ, ψ.

¹ The primary source, as all scholars now agree, was the Hieratic Egyptian.

Thirdly, I give the Latin or Roman alphabet, which has modified the Greek, and now also has twenty-four simple symbols and one compound. It has both capital and small letters, and eight vowel-symbols, thus :

THE LATIN OR ROMAN ALPHABET.

Vowels.

A, a; E, e; I, i (J, j); U, u (V, v); O, o; Y, y.

Consonants.

Gutturals K, k; C, c; G, g; Q, q.

Palatal (J, j; properly a vowel-symbol).

Dentals T, t; D, d; N, n.

Labials P, p; F, f¹; B, b; M, m.

Semivowels R, r; L, l; (Y, y; V, v; properly vowels).

Sibilants S, s; Z, z.

Aspirate h.

Compound X, x.

Fourthly ought to come our own English alphabet.

This need not be given as it is the same as the Latin alphabet, with the addition of the symbol W, w, and with the understanding that we also use J, j; V, v; Y, y as consonants; making twenty-six symbols in all.

All the Indian languages of the Āryan family have adopted the Nāgarī, though with various modifications.

On the other hand, the South Indian or Drāviḍian family (e.g. Telugu, Kanarese and Malayālam) have not adopted the Nāgarī. They have an equally complete equipment of symbols similarly classified. The Tamil alone is defective, and makes use of Grantha characters in writing Sanskrit.

As a matter of fact, however, even the Nāgarī is by no means a perfect alphabetical system. It has no symbols for the sounds of short *a*, *e* and *o* (as in our 'hat,' 'let,' 'on'), nor for some of the vowel sounds common in German and French, nor for our sounds of *z* and *f*, nor for the French sound of *j*, and it cannot adequately represent

¹ Partly dental.

some of the sounds common in Semitic and Turanian¹ languages. Nor has it any capital letters. It has doubtless a great advantage over the Greek and Latin alphabets in its ampler supply of vowel-symbols. Yet from its making short & inherent in every consonant (which is not marked by *virāma*), it is encumbered by far too great a burden of intricate compound letters.

All that I am at present concerned in asserting is that the Nāgarī, is the best and only standard to be taken as a guide in amplifying the Latin graphic system and adapting it to the transliteration of Indian languages.

The inadequacy of the Greek, Latin, and English equipment of letters, when unamplified by supplementary symbols, to accomplish all the purposes which every scientifically formed graphic system ought to serve—that is, to represent its own language in such a way that each sound shall invariably be represented by the same symbol—is apparent when we arrange these three alphabetical systems (as I have attempted to do) in the same order with the more perfect Nāgarī.

This is more especially brought home to us when we realize the fact that in our own language, which, like Sanskrit, Greek and Latin, belongs to the Āryan family, we have only 26 letters to represent about 40 sounds, while, with curious perversity, instead of adding 14 symbols or distinctive marks to our 26 letters, we employ about 400 combinations of these letters to represent our 40 sounds.

The need of a fuller number of symbols is especially noticeable in respect of the vowel-sounds. To remedy this deficiency, and avoid violating the rules laid down at the beginning of this paper, it is usual in German and French to combine simple vowel-symbols together (thus, *ai*, *au*, *eu*, *ou*, etc.), or to make use of distinctive dots, marks and accents (as in German and French, thus *ö*, *ü*, *è*, *é*, *ê*, etc.), according to one invariable method and with some regard for scientific accuracy.

¹ I use the name Turanian—though unsatisfactory—as the best yet invented to comprehend all non-Āryan and non-Semitic languages.

Unhappily in English we not only refuse to use supplementary marks, but in our collocation and permutation of vowel-symbols with consonants, show such an utter disregard of all consistency that a chaotic system of writing our admirably vigorous and flexible language is the result.

Here are a few artificial sentences which I have put together to illustrate the hopeless alphabetical chaos which our abuse of the Latin vowel-symbols has brought about.

1. The mother-bird flutters anxiously and patiently around the young pigeons and feeds them without guerdon.

2. A tall gentleman entered the tram-car after saying farewell.

3. The boy George ought to be taught to row with a small oar or scull. (Add the words 'drought' and 'draught'.)

4. Give that policeman a guinea for seizing the thief.

5. Be merry as a bee; be never heavy-hearted; yea, eat your bread and meat with cheerfulness; nay, be like mediæval cœnobites, living for each other and the people, keeping the key of happiness by benevolence, cherishing neither spite nor pique, giving and not receiving relief. (Add 'plaguy,' 'Lea,' 'Lee,' 'Legh,' 'Leigh,' 'Beauchamp'.)

6. Bibles piled in the aisle pain the sight of the choristers who sing in the choir.

7. Is it true that he gave a few pence to two too truant musicians who move and manœuvre about like vagrant troubadours in your and our town?

8. Not a soul named Beaufort came with us, and we know no beautiful girl named Beauchamp, and no one named Bowman, and we owe nothing to that yeoman for rowing us in that boat. (Add 'toe,' 'sew,' 'dough,' 'oh l')

9. Though cough and hiccough plough my chest through, I will go to the rough Lough and fetch water to fill the troughs for the horses which cruel men have houghed.

These nine examples will suffice to make it clear that our method of applying the Latin alphabetical symbols to the expression of English sounds is an utterly misleading guide to their pronunciation.

Thus, in the first, we use 10 different vowel-symbols or

collocations and permutations of vowels in combination with consonants to represent the one sound of *a* in 'zebra,' 'cedar,' etc. In the second, on the other hand, the one vowel-symbol *a* represents 5 different sounds. In the fifth, 14 different combinations and permutations of symbols represent the one sound of *e* in 'be.' In the eighth, 11 represent the sound of *o* in 'no.' In the ninth, confusion is worse confounded by our adding the two consonantal symbols *gh* to the two vowel-symbols *ou*, so as to express eight quite differently sounding words in which *gh* is either silent or has the sound of *k* or *kh*, or *p* or *f*.

In fact, our orthography has little connexion with orthophony, and is often little better than ideography.

Happily our vagaries and incongruities in consonantal spelling are generally not so misleading as our violation of all law and order in our use of the vowel-symbols. Nevertheless any one who, despairing of our vowel-spelling, looks to our use of the consonants as a guide to the pronunciation of English, will be confronted with several sufficiently confusing inconsistencies (as, in our occasional use of *c* for *s*, *g* for *j*, *s* for *sh*, *s* for *z*; e.g. 'city,' 'gibbet,' 'sure,' 'advise').

On the whole I think we may agree with a certain Dr. Herman in "The Caxtons" when he expressed a strong opinion that "a more lying roundabout puzzle-headed delusion than that by which we confuse the clear instincts of truth in our accursed system of spelling was never concocted by the father of falsehoods."

Nay, we may even acquiesce in the language of the Report of the American "Commission on Amended Orthography," in 1889, that "the English language is so grossly misspelt as to be an obstruction to the etymologist; a needless consumer of time, money and energy; a falsifier of history; a perverter of the logical and of the moral faculty; a hindrance to education; a chief cause of illiteracy and a clog upon the wheels of general progress."

Of course I need scarcely say that our misspelling of English has nothing whatever to do with transliteration, and certainly I have no intention of mixing up with my present

subject the vexed question of English spelling-reform, so ably and persistently advocated by Mr. Pitman.

Nevertheless some remarks on our kakographic inconsistencies were needed; because before entering on the question of a uniform system of transliteration, there are two points which I wish to bring out in strong relief: first, that the Latin alphabetical symbols ought not to be held responsible for our English abuse of them; secondly, that Orientalists ought to give up all attempts at conveying to English-speaking non-Orientalists the correct pronunciation of Oriental words by attempting to adapt transliteration, or at least vowel-transliteration, to any supposed uniform English method of pronouncing the Latin vowel-symbols.

And now with regard to the possibility of a uniform system of transliteration, I begin by contending that the Latin alphabet, notwithstanding its deficiencies, is so admirably simple, practical and pliable, that by the addition of a few marks or points—like those already employed over the letters *i* and *j*—it may be rendered capable of the most regular, methodical, and scientific adaptation to every purpose of transliteration.

Furthermore I contend that, although the limitations of time and space compel me to restrict my present remarks to Indian languages, yet the growing importance of this subject in connection with all Oriental studies impels Orientalists to extend their view over the whole linguistic field, and to consider the applicability of the Latin symbols to the graphic systems of all the languages of the East.

Indeed, most of us are aware that important Oriental texts—such as the *Ṛig-veda*, part of the *Yajur-veda*, the *Aitareya Brāhmaṇa*, the *Divyāvadāna*, important portions of the *Pāli Tripiṭaka*, not to speak of *Zend* and *Hindūstānī* texts and *Pāli* examination papers—have been already effectively transliterated and printed in the Indo-Latin alphabet for the benefit and convenience of scholars, who are nevertheless quite conversant with the Indian graphic systems:—

Also that many excellent translations of Oriental works

have been published, involving constant transliteration of Oriental words:—

Also that numerous Oriental Societies—such as those of the United Kingdom, India, Ceylon, America, Germany and France—constantly put forth valuable papers, the utility of which is much enhanced by the free employment of equivalent Latin letters as a substitute for, or in conjunction with, the more complicated Oriental characters:—

Finally that in all popular works on Eastern subjects proper names have to be transliterated for the benefit of general readers.

No wonder, then, that the question of how far it may be practicable to bring about among Orientalists of all nations more harmony of practice in carrying out the detail of transliteration, has for some time been a burning question which has not yet burnt itself out, although it is now in one class of languages, at least, tending gradually towards—so to speak—the desired haven of Nirvāṇa.

I have myself urged the discussion of the question with a view to the settlement of controverted points, at two International Oriental Congresses; and at the Berlin Congress of 1881, as a result of the paper I then read, a Committee was appointed, which, however, so far as I am aware, has never formulated any scheme or drawn up any report.

Nevertheless a careful observer in the present day may note that, as a result of a kind of natural selection or survival of the fittest, the practice of all Oriental scholars—*so far as Aryan languages are concerned*—is settling down into an acceptance of Sir William Jones's principles of transliteration (see p. 620) as propounded by him in the very first paper of the *Researches of the Bengal Asiatic Society* in 1788.

Doubtless Sir William Jones's scheme has since been improved upon and modified. Each nation has shown its predilection for the employment of particular equivalents, and some prefer their own special forms of supplementary marks. Moreover to this day isolated variations are being tentatively put forward by individual scholars.

Furthermore the Oxford University Press in its attractive and stately array of translations of "Sacred Books of the East"—now in process of being printed—has introduced peculiar elements of disturbance, about which I shall have to speak more in the sequel.

If then my estimate of the present situation is correct, surely the time has come for some united attempt to bring about international uniformity in the details of a matter which has so weighty a bearing on the promotion of Oriental studies generally—whether Āryan, Semitic, or Turanian—and I may add, on the spread of education among the millions of our Indian fellow-subjects.

But here, of course, the question will be asked, who is to take the lead and how and when and where? In reply, I repeat what I said at the Berlin Congress:—Great Britain, or rather the United Kingdom, is the greatest colonizer, the greatest settler, the greatest commercial power in the world; and her language is more generally diffused over the habitable globe than that of any other people.

Moreover as the ruler of India she is bound to give her unlettered millions of subjects the *option* of acquiring a simple alphabet, which would, if adopted, reduce the labour of education now much increased by the complexity of indigenous graphic systems.

At any rate she is bound to give them a system of transliteration formulated by English-speaking Orientalists, and therefore better calculated than any other to bring their alphabets into harmony with ours.

Hence I contend that of all nations the United Kingdom is in duty bound to take the lead.

But here again we are confronted with another difficulty. The initiative can only be taken by a corporate and well-organized Oriental Society, and of such I am happy to say there are several in the British Empire.

The oldest is that founded at Calcutta by Sir William Jones in 1784—the Asiatic Society of Bengal—now 106 years old. I was present at its Centenary celebration in 1884, when Dr. Rājendralāla Mitra and the then President,

the Hon. H. J. Reynolds, O.S., gave a summary of its history in the presence of the then Governor-General (Lord Ripon).

The Bengal 'Asiatic Society' may be described as the germ out of which all other Oriental Societies have developed, and since, as I have stated, its first President, Sir William Jones, was the first to write a scientific paper on the transliteration of Indian Languages, it might well be called upon to take the initiative in proposing some universal international system applicable to all Eastern languages. The chief objection to its interposing in such a matter would be that its geographical situation is too remote. The same objection would apply to initiative proposals emanating from the Societies of Bombay, Madras, and Ceylon.

Hence I submit that our own Asiatic Society (founded in 1823), from its central position in the commercial capital of the world, as well as from the prestige of its great names and possible future connection with the Imperial Institute—now approaching completion—ought to lead the way in promoting this most important aid to the prosecution of Asiatic studies.

Furthermore, I contend that we ought to be loyal to our own nationality. We ought in the first place to adhere generally to the lines laid down by perhaps the most accomplished of all our own pioneers of Oriental learning, whose memory is perpetuated by two cenotaphs at his own University of Oxford. And in the next place, if there are any deviations from those lines which may seem desirable to our own Orientalists, we ought to ask the Orientalists of other nations who have generally accepted Sir William Jones's principles to consider also our proposed deviations in points of detail.

And with a view to make these deviations clearer, as well as to lay before you a definite proposal which may possibly prove acceptable to Orientalists of our own and other nations, I now proceed to give a short historical account of the progress of transliteration from its earliest origin at Calcutta.

You will agree with me that it is scarcely worth while to notice the first rude efforts of some well-meaning persons, who seem to have had no other aim than to write Oriental words in such a way that illiterate English soldiers and half-educated Anglo-Indians, innocent of all anxiety to acquaint themselves with Indian languages, might pronounce them with a fair amount of accuracy—efforts which resulted in writing *Seapoy* for *Sipāhī* and *Sir Roger Dowler* for *Sirāj ud doulā* (for *doulāt*).

Turning rather to the first scientific attempts at rendering Oriental symbols into English characters, we shall find that the earliest transliterators—like all other innovators and would-be benefactors—had to encounter many prejudices, and were much hindered by mutual jealousies and dissensions.

Their chief conflicts took place on the battle-field of the vowel-sounds. It was the question of vowel-transliteration¹ which gave rise to the first controversies, and we soon find transliterators inclined to separate themselves into two camps—the one asserting that there was some general way of pronouncing certain vowel-symbols, or combinations of symbols, in English, which, if adopted as the basis of transliteration, might ensure a correct pronunciation of Oriental words by non-Orientalists; the other despairing of extracting any order out of our chaotic vowel-combinations, and founding their system of transliteration on the more regular Italian or French method of vowel-pronunciation.

The chief battle, however, was fought over the right method of representing the obscure sound of *a*, which is inherent in every Nāgarī consonantal symbol, and although found in such words as our 'zebra,' 'cedar,' may be represented in English—as I have already shown (see p. 612)—by one of our five vowel-symbols, *a*, *e*, *i*, *o*, *u*, or by *ou* or even by *eo* or *ie*, or still more curiously by *ion* combined, making ten ways in all.

Mr. Halhed was the first to propose an Anglicized vowel-

¹ This may be proved by a reference to the volume edited by me for the late Sir Charles Trevelyan in 1869, the title of which is "Original Papers illustrating the Application of the Roman Alphabet to the Languages of India."

scheme, which, he thought, would ensure the proper pronunciation of Oriental words. In his "Code of Gentoo Laws"—compiled by order of Warren Hastings in 1776—he propounded the following vowel-system, arranging it in the order of the Nāgarī alphabet already given :

ē, ā ; ēe, ēē ; ōo, ōō, rēē, rēē ; āē ; ī ; o, ōu.

It will be seen that he represented the obscure sound of *a* by *ē*, as in our word 'mother,' German 'mutter,' and in the French 'le.'

Mr. (afterwards Sir Charles) Wilkins seems to have accepted Mr. Halhed's ideas, but improved upon them. He appears to have begun transliterating about the year 1780 ; for he tells us that about that time he put into English the greater part of three popular Sanskrit grammars. It is noteworthy that his improvements consisted in the important alterations of writing *d* instead of *ē* for the obscure *a*, and *ē* instead of *ae*, and *āi* instead of *ī* ; but he still adhered to the symbols *ēē*, *ēē*, *ōo* and *ōo*.

It was reserved for Sir William Jones in 1788 to stamp Wilkins's introduction of the symbols *a*, *e*, and *ai* with the weight of his authority, and to recommend the use of *i*, *u*, and *au*, instead of *ee*, *oo*, and *ou*.

Curiously enough, however, the celebrated founder of the Bengal Asiatic Society seems to have been undecided as to the most important symbol of all ; for we find him allowing the occasional employment of Mr. Halhed's short *e* for *a*, and himself writing *Menu* for *Manu*, *serca* for *sarva*. He also preferred accentual to prosodial marks for the long vowels (except in two cases),¹ and he suggested no distinguishing mark for the guttural nasal.

In regard to the consonants, too, he sanctioned the introduction of an element of confusion by allowing the option of employing *c* for *k*.

I now give Sir William Jones's scheme, as put forth in his first paper (omitting the alternative symbols).

¹ That is for the vowels now usually marked *ri* and *ṛi*, or by some German scholars *r* and *ṛ*.

SIR WILLIAM JONES'S SCHEME.

Vowels.

a, á; i, í; u, ú; rī, rī; é, ai; ó, au.

Anusdāra, m. *Visarga*, h.*Consonants.**Gutturals*, k, kh; g, gh; n.*Palatals*, ch, chh; j, jh; ñy.*Cerebrals*, ṭ, ṭh; ḍ, ḍh; ṇ.*Dentals*, t, th; d, dh; n.*Labials*, p, ph; b, bh; m.*Semivowels*, y, r, l, v (or w).*Sibilants*, ś; sh, s.*Aspirate*, h.

Evidently, then, if my summary up to 1788 is correct, the merit of the improvement on Mr. Halhed's original system partly belongs to Mr. Wilkins, who was present at the first meeting of the Bengal Asiatic Society, on January 15, 1784, but the credit of first fixing an authoritative scientific standard must be accorded to its founder, Sir William Jones.

This standard of transliteration was adhered to more or less closely by several eminent scholars who succeeded Sir William Jones; for example, by Colebrooke in 1805, Wilkins himself in 1808, Yates in 1820, and later by H. H. Wilson, Shakespeare, Forbes, Johnson, Eastwick, and others.

We must now, however, turn to the hostile camp formed by Dr. Gilchrist's treatment of vowel-transliteration.

This well-known scholar was born in 1759, and went out as an Assistant Surgeon in the East India Company's Service in 1783, becoming full Surgeon in 1799. He soon acquired a fair knowledge of Sanskrit and Persian, but, deprecating the prominence given to Persian—which at that time was the language of the Government Courts—he very laudably determined to promote a better knowledge of Hindūstānī, and with that object, discarding his own European garments and clad as a native, he sojourned in the districts where the best Hindūstānī was spoken.

Leaving India in 1804, he was made Professor of Hindūstānī at the Oriental Institute in Leicester Square—under the sanction and with the support of the Directors of the East India Company—in 1818. Many were the Hindūstānī text books which he published and sold to his pupils at high prices (each set costing, it is said, from £10 to £15).

Unhappily the evil effects of the confusion introduced by him into Oriental transliteration remain to the present day; as may be seen in a recent copy of a well-written native newspaper called *Reis and Rayyet* (sic) just received by me from Calcutta.

It is doubtful whether he had arrived in India at the beginning of 1784; and it is known that he was not present at the first meeting of the Bengal Asiatic Society then held.

His system, after all, differed little from Mr. Halhed's (except in adopting *u* for *ā* and *ē*), and was promulgated about the same time. It dates from the year which preceded the putting forth of Sir William Jones's scheme, for it was in 1787 that Dr. Gilchrist published the first edition of his "English and Hindoostanee Dictionary" at Calcutta. His Grammar appeared in 1796.

Dr. Gilchrist, like Mr. Halhed, made the mistake of imagining that vowel-transliteration might be so carried out as to secure a fairly accurate pronunciation of the vowel-symbols by Englishmen; but Dr. Gilchrist fell into the further great error of transliterating the obscure sound of *a*—inherent in Nāgarī consonants—by *u*. If our English word zebra had been a Hindī or Hindūstānī word, Dr. Gilchrist would have written it zeebru.

Dr. Gilchrist's original vowel-scheme (omitting equivalents for the Sanskrit *ṛi* and *ṛī*) was as follows:

u, *a* (for *ā* in our word 'far'); *i*, *ee*; *ōo*, *oo*; *e*, *ue*; *o*, *uo*.

In some of his later works he substituted *y* for *ue* (Grammar, 1796), and *ou* for *uo*. Unfortunately he was supported in his views by many good Hindūstānī scholars of his own day in India, among whom I may name Mr. Romer, of the Bombay Civil Service, and Mr. H. T. Prinsep, of

Bengal, who wrote a paper in support of the Gilchrist system for the Journal of the Bengal Asiatic Society, dated as late as June, 1834. Mr. Prinsep's paper ended with these remarkable words: "The Gilchrist alphabet, as now generally introduced and used in the public offices of the Presidency, conveys to the uninitiated a more correct and true notion of the proper pronunciation than the antiquated and rejected system of Sir William Jones."

We members of the Royal Asiatic Society in 1890 know full well that, although this might have been true in 1834, time and experience have brought about an exactly opposite result; for the majority of scholars in these days have adopted Sir William Jones's system, and rejected the antiquated and unworkable method of Dr. Gilchrist.

Turning, in the next place, to the history of consonantal transliteration, we may observe that the views held and the scheme propounded by Sir William Jones differed little from those of Halhed, Wilkins, and Gilchrist, *in regard to consonants*.

Of course, we know that the relation of the vowel to the consonantal sounds of a language may be compared to the relation of the flesh to the bones of the human body. Yet the flesh can no more stand without the bones than the bones without the flesh, and the bony skeleton is, after all, the most durable and the less liable to be dissolved. It is certainly the strength and variety of the consonants of a language which give force and character, and even meaning, to its sounds.

This will be evident if we take the common English sentence, "How do you do?" Deprive this useful phrase of all its vowels except one and it might still be intelligible, thus: "How dow yow dow?" or "Hū dū yū dū?" but deprive it of all its consonants except one, and it becomes meaningless, thus: "How ho hou ho?" or "Hou hū hū hū?"

The importance of consonants is also evident from the Semitic systems, in which the consonantal symbols are nearly everything, and can stand alone without the vowel-points.

Hence it follows that in the transliteration of consonants it is even more important than it is in vowel-transliteration, to consider whether the usual power given to the pronunciation of consonantal symbols should conform to the English usage or to that of any other European language, such as Italian, French or German. Clearly, then, one great merit of Sir William Jones's scheme is that, while it renounces our chaotic vowel-system, it preserves the English value of certain important consonantal symbols.

This is more especially conspicuous in its giving the usual English sounds to the symbols *ch* and *j* in our words 'cheer' and 'jeer,' sounds equally common in Indian languages.

Its conformity, so far as practicable, to English usage is also conspicuous in its adhering to the Latin practice of adding the symbol *h* to represent the aspiration of certain consonants, a practice which, although it offends against one of the alphabetical rules laid down at the beginning of this paper, is now adopted by the majority of European Orientalists (e.g. *kh*, *ph*, etc.).

And we have here again to bear in mind that the English language is more generally prevalent in the world than any other, and that we are bound, as rulers of India, to give our Indian subjects a form of transliteration which shall, as far as possible, bring it into harmony with our alphabet. This cannot be done with the vowels, but it is more possible with the consonants, and Sir William Jones has wisely taken this into consideration in his application of *ch*, *j*, *sh*, etc.

It might, of course, be fairly urged by French Orientalists that, as their general pronunciation of the Latin vowel symbols was followed by Sir William Jones, he ought also to have respected the French use of *ch* (in words like *cheval*), and of *j* (in *jé*, etc.).

German Orientalists, too, might have put in a plea for their own use of their own *ch* and *j* (in *ich*, *doch*, *ja*, etc.).

And it is well known that it was for a long time the practice of German Orientalists to represent the English and Indian sounds of *ch*, *j*, and *sh* by combinations representing these sounds in a way suited to themselves, e.g. by *tseh*, *dach*,

and *sch*, while the French (*e.g.* Burnouf) used *tch*, *dj*, and *ch*. Bopp, too, introduced the practice of placing the Greek symbol for the hard aspirate above an aspirated transliterated Sanskrit consonant, thus, *t̑*, for *d'*, *th*, *dh*.

In 1855, however, the great scholar Lepsius of Berlin published the first English edition of his Standard Alphabet, applicable to all languages.¹

My present concern is only with Lepsius's method of transliterating the Nāgarī alphabet, and this I now append, with the especial object of exhibiting his original system of representing the palatal sounds¹—so common in the Indian and English languages—by repeating the guttural symbols with slight distinctive marks:—

LEPSIUS'S ORIGINAL SCHEME FOR THE NĀGARĪ.

Vowels.

a, ā; i, ī; u, ū; r, ṛ; ē, āi; ō, āu.

Consonants.

Gutturals, k, k̑; g, ḡ, ṅ.

Palatals, k̑, k̑̑; ḡ, ḡ̑, ṅ̑.

Cerebrals, t̑, t̑̑; ḍ, ḍ̑, ṇ.

Dentals, t, t̑; d, d̑, n.

Labials, p, p̑; b, b̑, m.

Semivowels, y, r, l, v.

Sibilants, ś, ṣ, s.

Aspirate, h. Visarga, ḥ.

This method of transliterating the palatals has been followed by Böhtlingk and Roth in their great Sanskrit-German Dictionary, as well as by Böhtlingk in his own special Dictionary, and by Lassen in his great work called "Indische Alterthumskunde."

These scholars, however, follow the usual German method of employing *j* for our *y*, as well as the French *ç* to represent the palatal sibilant *ś*. Moreover they differ from

¹ A second edition appeared in 1863. In this, Lepsius—though adhering to *k̑*, *ḡ̑* as standard symbols—admits *t̑*, *j̑* for them respectively, and adds *h̑* to the simple consonants to denote the aspirated forms.

Lepsius in employing *sh* for the cerebral sibilant, and adding *h* for the aspiration of the consonants (as in *kh* instead of *k*).

Unhappily, the Editor of the "Sacred Books of the East," published at the Oxford University Press, has promulgated in that long series of works a scheme which he calls "a missionary alphabet," in which the transliteration of the Nāgari palatals conforms to the original principles of Lepsius. Hence in these valuable books intended for the use of English-speaking Orientalists (including natives of India) throughout the civilized world, we have our common sounds of 'ch' and 'j' (equally common in Indian languages) represented by *k* and *g*. The consequence is that such names as Chandra-gupta, Such-chid-ānanda, are spelt *Kandra-gupta*, *Sak-kid-ānanda*, while Jaina is *Gaina*, and—the italics being often omitted by printers in quotations from these works—a false pronunciation of important proper names is being everywhere propagated. Moreover, he marks the important cerebral letters by italics (which are always slippery when single or isolated) instead of by dots underneath.

Unhappily, too, as most English Orientalists think, the "Church Missionary Society," after several conferences called together in 1853, resolved to adopt Lepsius' Standard Alphabet in its entirety (with its awkward collocation of Greek and Latin symbols) for their Missionary alphabet.

This great Society no doubt did good by substituting his scientific system for the hap-hazard no-system prevalent before, and by recommending it for reducing unwritten languages to a uniform orthography in European letters.

For it must not be supposed that the subject of transliterating already existing graphic systems is to be confused with the question of formulating the best alphabet for *unwritten* languages; yet it is certain that the same principles ought to be applied in both cases, and if I have made myself clear, it will be understood why I consider the adoption of Lepsius's scheme—even in the revised form of 1863—a mistake, and (should it be much carried into practice) a misfortune in its bearing on Missionary work among Eastern populations. Every scholar admits the scientific

excellence of Lepsius' system—as well as that of Prince L. L. Bonaparte's scheme improved on by Mr. A. J. Ellis, and Mr. Sweet—from a *philological* no less than from a *physiological point of view*; but whether these are practically adapted to Eastern nations brought into contact with English civilization and English ideas, is another question; and I may perhaps be pardoned if I put in a plea for what is practical, practicable, and workable.

Then, again, I am sorry to say that the "British and Foreign Bible Society"—which has published 294 versions of the Bible, and is therefore a great Linguistic as well as a great Missionary Society—does not appear to have adopted any settled principles either of *transliteration* or of formulating *graphic systems for unwritten languages*.

The same may be said of the "Society for the Propagation of the Gospel" and of the "Society for Promoting Christian Knowledge," although the last-named Society ought surely to follow some fixed standard of transliteration, since it publishes numerous works on Eastern subjects.

And this brings me to the terminus of my paper. We have arrived at the main object to which my observations have tended, namely:—Is the question of a more uniform international method of transliteration ripe for settlement?

It seems to me, I repeat, that the practice of Orientalists is converging towards agreement in the *Āryan* languages, and we find them generally adopting a method which conforms to an improved scheme based on the principles laid down by Sir William Jones—a scheme which, as already stated, has been adopted by Professor Leumann and myself (with modifications of our own) in the second edition of my *Sanskrit-English Dictionary* published at Oxford. In this scheme *c* takes the place of *ch*, because our English *ch* does not properly represent an aspirated consonant, but a simple sound as in the Italian word '*dolce*.' In fact it may itself be aspirated as in the Sanskrit word *chāyā*.

We have preferred the horizontal mark (as enabling us to use accents) to the saddle-back-shaped circumflex, keeping the latter to denote the blending of vowels by Sandhi.

Of course our scheme applies only to Indian languages of the Āryan family and, no doubt, even if we restrict ourselves to this limited area, we shall find differences of detail which commend themselves to scholars of various nationalities.

I notice, however, that Professor Oldenberg, in his latest work on the Veda, uses almost every one of the same equivalents for the Nāgarī letters as those of our scheme. He agrees with us in rejecting the French *ç*, merely differing from us by his preference for *ʃ* instead of *ʒ* to represent the palatal sibilant.

Many other German Orientalists, too, now follow Lepsius' later ideas, employing *c* for the English sound of *ch* in 'cheer'; and *j* for that of *j* in 'jeer,' and *y* for that of *y* in 'your,' all of which sounds are common in Indian languages.

Still we find among English, German, and French scholars a residuum of differences which might, I think, be discussed in a spirit of mutual harmony and concession, with a view to the eventual adoption of complete international uniformity not only in Āryan, but in Semitic languages.

Whether such an eventuality is possible in Turanian languages with ideographic systems—especially Chinese—I leave our present President (Sir Thomas Wade) to inform us; merely observing that the existence of about 43,000 distinct ideographic symbols in Chinese (according to Prof. Legge and the Chinese Ambassador whom I once met at the Professor's house¹) makes the uniform transliteration of Chinese—if possible at all—a question which seems likely to glow with incandescent heat, should our missionaries ever take up the matter seriously in its bearing on the spread of Christian education. As to Japan, I understand that a Japanese New Testament transliterated into Latin or Roman characters is already in existence.

I need scarcely add that my present paper leaves wholly untouched the difficult question of deciding upon the best alphabet for unwritten languages such as the African.

The following are a few of the points which it seems to me

¹ This gentleman, however, confessed that he himself only knew about 8000, and that few of the most highly educated knew more.

desirable to discuss and in respect of which some definite conclusions ought to be arrived at—assuming of course that the desirability of employing *e*, *j* and *y* as equivalents for the Indian palatal letters is already generally admitted.

1. Whether the saddle-back-shaped circumflex, or the horizontal mark, or the acute accentual mark should be employed for long vowels?

2. Whether the Sanskrit vowel sound *ṛi* should be expressed by *r* (as some German scholars hold) or by *ri*?

3. Whether *e* alone or *e* with some diacritical mark should stand for the Nāgarī च and our sound of *ch* in church?

4. Whether the guttural nasal should be represented by *ñ*?

5. Whether *ś*, or *ṣ*, or *ṣ*, or the French *ç* should stand for the Nāgarī palatal sibilant? (Note that the use of *ç* is common in Germany and America, and that Professor Cowell of Cambridge, Professor Weber of Berlin and Professor Whitney of America support it.)

6. Whether a simple symbol, such as *ʃ* rather than *śh*, should stand for the cerebral sibilant?

7. Whether *x* should be adopted (as it has been by Lassen, Dr. J. Muir and others) for the common compound *kśh*?

8. Whether some formal exception could not be taken to the Bengālī system of transliterating the inherent short *ā* by the symbol *o* (e.g. Brahmo-Somaj for Brāhma-Samāj), and to the Burmese system of transliterating *s* by *th*, etc.—practices which result from mixing up the question of transliteration with that of pronunciation.

9. Whether any agreement can be brought about in transliterating Semitic languages? (Note that evidently much disagreement still prevails in regard to certain Arabic symbols, as may be seen by comparing Professor Nöldeke's method with that of our scholars.)

10. Whether, at least, some authoritative transliteration of common names, both Āryan and Semitic, could not be drawn up and recommended to be adopted by those who write books on Oriental subjects for general readers? In regard to this point we know that the Government of India has sanctioned

the generally scientific system of transliteration adopted by Sir W. W. Hunter in the *Gazetteers* edited by him; and it becomes a question whether scholars are to uphold the Government decision.

11. Whether in certain of the commonest names (especially of places), scientific accuracy should not be sacrificed to time-honoured usage (as in the name 'Benares,' etc.).

Probably Sir W. W. Hunter will testify to the importance of this last question. It concerns also the spelling of names of persons (as, for example, all the names in our Bible beginning with *J*, such as 'Job,' etc.).

As to the names of persons occurring in Indian languages, I merely instance two common names:—1. that of Buddha (the first syllable of which is constantly mispronounced, like our English word 'bud,' through the prevalence of the false idea that transliteration is always to be a guide to pronunciation, while this name is still spelt *Bouddha* by French writers); 2. that of the Arabian prophet (Muhammad or Mohammed or Moḥammed or commonly Mahomed, Mahomet), and names connected with him (Ahmad or Ahmed? Muslim or Moslem? Kurān or Qurān or commonly Koran? etc.).

To those who doubt whether chaos does not still reign supreme in the transliteration of common names, I commend a study of the lists occurring in the Calcutta University Calendar for 1890, extending for nearly 300 closely printed pages.

I conclude with a proposal that our Royal Asiatic Society should communicate (through its Council) with other Oriental Societies in other parts of the world, as well as with the Editorial Committees of the religious societies mentioned before (pp. 625, 626), and recommend that two Delegates should be sent from each Society to the next Oriental Congress or Congresses, charged with the duty of conferring together on the possibility of formulating a uniform international scheme of transliteration.

[The above paper was read on April 21, 1890.]

The first of these is the fact that the United States is a young nation, and that its history is a history of growth and development. It is a history of a people who have been able to overcome many difficulties and to build a great nation out of a small colony.

The second fact is that the United States is a nation of immigrants. It is a nation of people who have come from many different parts of the world, and who have brought with them their own customs and traditions. This has made the United States a melting pot of different cultures and peoples.

The third fact is that the United States is a nation of pioneers. It is a nation of people who have been able to overcome many difficulties and to build a great nation out of a small colony. It is a nation of people who have been able to overcome many difficulties and to build a great nation out of a small colony.

The fourth fact is that the United States is a nation of freedom. It is a nation of people who have been able to overcome many difficulties and to build a great nation out of a small colony. It is a nation of people who have been able to overcome many difficulties and to build a great nation out of a small colony.

The fifth fact is that the United States is a nation of progress. It is a nation of people who have been able to overcome many difficulties and to build a great nation out of a small colony. It is a nation of people who have been able to overcome many difficulties and to build a great nation out of a small colony.

The sixth fact is that the United States is a nation of peace. It is a nation of people who have been able to overcome many difficulties and to build a great nation out of a small colony. It is a nation of people who have been able to overcome many difficulties and to build a great nation out of a small colony.

The seventh fact is that the United States is a nation of justice. It is a nation of people who have been able to overcome many difficulties and to build a great nation out of a small colony. It is a nation of people who have been able to overcome many difficulties and to build a great nation out of a small colony.

ART. XII.—*On a Proposed Method of Transliterating the Languages written in the Arabic Character.* By H. T. LYON, M.R.A.S.

[Read March 17, 1890.]

IN bringing forward a scheme for the conversion of the Arabic character to the Latin—the second most widely spread alphabet of the world to the first—a word may be said as to the objections which the mere mention of such a proposal invariably evokes.

First comes that of the minor savant who, having acquired by years of laborious practice the facility of deciphering through his knowledge of word forms the sketchy hieroglyphics representing the Arabic letters, resists any attempt to provide the learner with an easier path to knowledge than that so painfully pursued by himself.

In reply to the arguments advanced by this class of scholar, I have no hesitation in declaring that the student who devotes himself to acquiring a certain vocabulary through the means of a good system of Latin transliteration will find himself months—aye, and years—in advance of his comrade who has fettered himself from the outset by attempting to cope with the mechanical difficulties of the character, which, by reason of its unfamiliarity, affords him little or no aid in recalling the visual form of words, so long as he is still ignorant of the language.

Another objector is the individual who bases his arguments on the truly Oriental ground that it is impossible to obtain the agreement of all scholars on the point, and that therefore it is needless to discuss the matter. But I do not think that he requires any more serious reply than does his more sympathetic though irrelevant colleague, who tells you that he would gladly see some universal scheme adopted for, say,

the Aryan languages, entirely forgetting that transliteration is a mere question of alphabets, and not of languages, and bears no relation to philological affinity. The accident of possessing an affiliated character brings, for example, from the transliterator's point of view, English into closer proximity with a Turanian language such as Turkish, than to its philological parent, Sanskrit.

Various attempts have been made to introduce systems, but none that I am acquainted with are sufficiently comprehensive in their aims, and most writers have confined themselves to some rough plan merely available for grammatical explanations, and so forth.

While on this subject it is curious to remark the extreme indifference shown by almost all grammarians to the method of transliteration they adopt.

Taking, for example, the first grammar under my hand—the Sanskrit one of Sir M. Monier-Williams—I find that, although it is transliterated throughout, not the slightest indication is given of the values assigned to the Roman characters, or the arbitrary symbols derived from them.

I will now give my principal objects in preparing this scheme:—

1. To assist students at the commencement of their studies.
2. To enable philologists to examine the structure of languages, with which they are not familiar.
3. For commercial Turkish, Persian, and Hindustani.
4. As a means of printing in Europe short notes, elementary grammars and transcriptions of documents. It will also enable the type-writer to be used.¹

The requirements I have kept in view are the following:

1. That the re-transcription back to the Arabic character shall be absolutely mechanical.
2. That the correct pronunciation should be indicated.
3. That as few special characters as possible should be

¹ It is not absolutely necessary to have a system of transliteration in order to enable a type-writer to be used. As a mechanical expert I have no hesitation in saying that with a very slight alteration the ordinary type-writer could be adapted to the Arabic character.

used, and that the values assigned to letters should not differ from their usual ones.

4. That a logical reason should be given for the selection of each equivalent, in order that by thus eliminating the elements of personal inclination or fancy, its general adoption may be insured.

The accompanying table shows my method of derivation of equivalents, and I have given it here with the notes attached to it in the form in which it was distributed when I read this paper.

In the first column it will be seen that I have written the Arabic alphabet according to its original order as preserved in the numerical value of the letters. This arrangement is that known as the "Ebjed," and is that from which the order of the letters in the European alphabet is undoubtedly taken. I have for the moment transposed the س and the ش as indicated by the bracket, as it will save some little explanation. In the second column, headed "Direct Representatives," I have written such of the Latin letters as have retained their original position and sounds, and with the exception of the ا, I think there can be no question as to the suitability of these letters to represent their ancestors. As regards the ا, it was early employed as a terminal vowel in the Semitic alphabets, and it was as a vowel that it found its place in the Greek alphabet. After careful consideration I have come to the conclusion that the ê forms a convenient equivalent, more especially as the â, which is also found in all printers' cases, forms a suitable companion for it to represent the broader sounds of the letter.

Proceeding to the next column, headed "Redundant;" I have placed here those letters which have disappeared from the European alphabet entirely, and, following the well-known mathematical method of representing cognate values by cognate symbols, I have selected the nearest letter, and placed a point underneath it; as the point is the simplest diacritical mark, and underneath is, from the type founders' point of view, the easiest position to place it in. It will be seen that I have thus reversed the almost universal practice of repre-

senting the ا by an h and the ع by an b . This is not very important, but there is a logical reason for this method, whereas there is none for the other. These four letters represent all the special characters required by my system for Arabic, and they may be found without difficulty at any well-provided philological printer's.

In the next column I have placed those letters which, though allied by Grimm's Law, have lost their original position in the Semitic alphabet. As to their suitability as representatives, I think there can be no doubt.

The next column I have headed, for want of a better name, "Suggestive Compounds." In most European languages, when an additional letter was wanted, the practice seems to have been, to take the letter which approximated most nearly to the sound required, and add an h to it, either with the idea of simulating the sound, or of forming an unpronounceable compound, which could be used as a mere arbitrary symbol. The objection to using this plan is its clumsiness and the uncertainty which exists as to whether the h forms a compound with the previous letter or is a distinct consonant. Some writers have placed a ligature uniting the two letters together; but this involves the cutting of a large number of special types of an expensive character. In some of the Slavonic languages the h is replaced by a circumflex placed over the previous letter, and although this gets rid of the question of uncertainty, the second objection remains, as these types can but rarely be met with. My proposal is, to use a detached accent, either of the form shown, or of a similar shape, for the purpose of replacing the h for the formation of compound letters, a plan which requires no additional type, and permits of the representation of a large number of characters.

In the column headed "Arbitrary Symbols" we find two letters represented, the ξ and the ē . For the first of these the inverted comma has so long been used as an equivalent, that I do not propose to suggest any alteration, although I would gladly see a more impressive symbol used for so important a letter. My proposal to represent the ē by g will

provoke lively criticism, but I have devoted considerable thought to the matter. In the first place I do not see why it is desirable to adopt two letters as an arbitrary representation where one can be equally well used. The gh, which is usually employed, possesses no distinctive sound in English, that I am aware of, except that of f, k and p. There are the further reasons that in German the g does occasionally assume the sound of ġ, and on the other hand, the ġ in Persian and Turkish is generally pronounced as g. In Turkish also, where the ġ frequently transforms itself to ڭ, the change from the q to the g is much less puzzling than the change to gh would be. The Arabs, too, invariably represent g by ġ in writing such foreign words as *telegraph*, and *Gordon*.

As regards the special Turkish and Persian letters, the first that calls for any remark is the k in its varying forms. To represent the Persian ک, I think the most logical method is to follow the example of the Persians themselves, who have taken the Arabic ك, and indicated its softened character by placing a line over it. Hence I have placed a cedilla under the k, as the most comprehensible method of indicating the softening. To indicate the further degeneration of the k to y in the Constantinople dialect, I have placed two cedillas under the k. The Spanish ñ affords a convenient representative for the Turkish sager nun.

The accompanying table gives, I think, sufficiently clearly my method of transcription; the principal points being the use of italic letters to represent the unwritten vowel sounds, and the non-insertion of any character to represent the hemza. The ornaments which are placed at the beginning of the words were intended to replace the capital letters, as their use would entail having all the special characters cut twice over. On after-consideration, I think it would be best to dispense with anything of the nature of capital letters, as their employment seems uncongenial to the spirit of Arabic calligraphy, and they would often present an incongruous appearance to European eyes, owing to the prefixes which are attached to the commencement of so many proper names.

To make a still greater contrast between the written and unwritten letters, capitals might be used in conjunction with the italics, thus:—

Specimen of Arabic.

Wa LaMMÄ ,aTTaŞaLaT MaYSUNu BiNTu MaJDaLin Bi
MU'AWiYÄtin RaD'Ya ,aLLaH 'aNHu Wa NaQaLaHA MiNa
,aLBaDWi iLÄ ,eL=S'a-M KANaT TaKT'uRu ,AL HaNYN

It has been urged that no system of transliteration can be of any value, owing to the differences of pronunciation prevailing in different provinces and countries. I trust I shall not be considered presumptuous in expressing a hope that the adoption of a definite system of transliteration may be the means of effecting a uniformity of language by establishing a definite standard of pronunciation, for I believe that the divergencies have arisen chiefly through the want of stable values of the Arabic letters.

In conclusion, I can only say that my claims to the attention of this meeting are based chiefly on the grounds of my having succeeded those who have already laboured in this field, and that I am thus enabled to profit by their work; while for my system, the strongest argument I can advance in its favour is that it only differs but little from those generally received.

I hope I shall be favoured with criticisms and suggestions from those who are interested in this very important question, as it is only by co-operation that any advance can be secured.

NOTES.

The following table gives the method of derivation of the equivalents. It will be seen that the letters which are redundant to the Latin Alphabet in the second column are all marked with a point underneath, and are the only four special characters required for Arabic. The object of replacing the h in compound letters by ¹ is to remove all doubt as to whether it is a compound letter or only an accidental combination. In elementary grammars, etc., a small h might be printed, thus—^hams.

TABLE OF PROPOSED ALPHABET.

Numerical Value.	Arabic.	Direct Representations.	Redundant.	Related Letters.	Suggestive Compounds.	Arbitrary Symbols.	Proposed Alphabet.	Numerical Value.
1	ا	a	...	...	...	...	a	1
2	ب	b	..	...	...	...	b	2
3	ج	...	...	j	...	...	j	3
4	د	d	...	...	...	...	d	4
5	هـ	ê (â)	h	...	...	...	h	5
6	و	...	...	w-u-o	...	...	w	6
7	ز	...	...	z	...	...	z	7
8	ح	h	...	...	...	...	h	8
9	ط	...	t	...	...	...	t	9
10	ي	...	...	yâ	...	...	y	10
20	ك	k	...	...	...	...	k	20
30	ل	l	...	...	...	...	l	30
40	م	m	...	...	...	...	m	40
50	ن	n	..	...	...	...	n	50
60	س	...	...	...	sh=s ¹	...	s	60
70	ش	...	...	...	...	...	'	70
80	ص	...	...	f	...	...	f	80
90	ض	...	z	...	...	...	z	90
100	ق	q	...	...	...	...	q	100
200	ر	r	...	...	...	...	r	200
300	س	s	...	...	...	...	s ¹	300
400	ت	t	...	...	...	...	t	400
500	ث	...	...	...	th=t ¹	...	t ¹	500
600	ح	...	...	...	hh=b ¹	...	h ¹	600
700	د	...	...	...	dh=d ¹	...	d ¹	700
800	ذ	...	d	...	...	...	d	800
900	ذ	...	...	...	dh=d ¹	...	d ¹	900
1000	ر	...	...	...	...	g	g	1000
				TURKISH.				
	پ	p	...	...	ch=c ¹			
	ز	...	...	..	zh=z ¹			
	ک-ک	k-k						
	گ	g						
	ن	n						

The Vowel Points and Orthographic Signs.

fethâ.	a.	e.	damâ.	u.	o.	karrâ.	i.	î.
tes'dyd.	{ Euphonic =. Example, el-rakym. Necessary. The letter is doubled. At the beginning of a word. Nil. Medial or final =. Example re-is, la-lu. Example 'abdu el melki.							
hemzâ.	{							
wawâ.	{							
elâ behnâ.	{ Small vertical elâ 'î. Example 'îsâ hâd'î.							

Rules for transcribing from the Latin character into the Arabic.

- (1) All letters written in *italics* to be omitted in the transcription.
- (2) Whenever a word or syllable commences with a vowel a hamz must be inserted.

Specimen of Arabic.

→wa laumâ attajalel →mayyuna bâtu →majdalin bi →mu'awi-
yâtis red'iya →allâh anhu wa naqaleha min albadri ilâ el=s'a-m kanet
tekt'uru al hâqyn 'ala nashîh wa el=tad'akkura limasqoti ra-siha la astama'a
'alayha d'ata yaumihi laumâ 'ahâ tana idu wa.

TURKISH.

The Vowels.

a, o, u, i, Heavy. | e, â, ü, î, Light.

Specimen.

→h'atun dymek bixim validêlerimix olan qadynlar dymek dir. →ys'tê
böylê bir qadyn oldujâ zenkyn yken nasîlê közlerynê bir h'astâliq keler deyken
perdê eyner byelârê qadynmîdâ ady kör qalur.

→hikâyey. →oldujâ zenkyn bir kör h'atun ey ye'un lazim olan s'eylery
birer birer e'arâ'ydan almazâ bas'lar ve köyâ aldygy s'eylerîñ eñ küzeliñ alur
deyn zenn eyder. →mekrêñ bap aldygy s'eylery körm-dyky ye'un eñ tene s'eyler
aldygyny bylmez ydy bir zenn soñra közlerynê baqmaq üzrê hemdê eyu oytmek
s'artylê bir hekymîñ söyles'ur hekym lazim olan ilajlary eyner derken qadynmî
közlery ac'ylur ve evveljê küzel deyerek almaz' oldygy.

For ordinary commercial work and quick writing it will be found unnecessary to indicate, in many cases, whether the vowels are written or not, as it can easily be determined by the following simple rules:—

e, î, i are never written, so they need not be marked. The other vowels are always written at the beginning and end of a word, and never in any grammatical affix which does not end in a vowel. It is therefore only necessary to indicate these medial vowels when they do not occur in grammatical affixes. The same paragraph is repeated below, and it will be seen with these rules that only a few words need be marked, and those chiefly foreign.

Second Specimen.

h'atun dymek bixim validêlerimix olan qadynlar dymek dir. ys'tê böylê bir
qadyn oldujâ zenkyn yken nasîlê közlerynê bir h'astâliq keler deyken perdê
eyner byelârê qadynmîdâ ady kör qalur.

hikâyey. oldujâ zenkyn bir kör h'atun ey ye'un lazim olan s'eylery birer
birer e'arâ'ydan almazâ bas'lar ve köyâ aldygy s'eylerîñ eñ küzeliñ alur deyn
zenn eyder. mekrêñ bap aldygy s'eylery körm-dyky ye'un eñ tene s'eyler
aldygyny bylmez ydy bir zenn soñra közlerynê baqmaq üzrê hemdê eyu oytmek
s'artylê bir hekymîñ söyles'ur hekym lazim olan ilajlary eyner derken qadynmî
közlery ac'ylur ve evveljê küzel deyerek almaz' oldygy

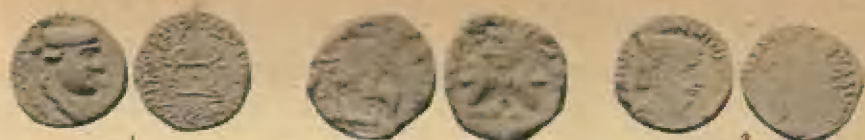
Example of Verb.

sevêjekim
sevêjeksin
sevêjek

sevêjekiz
sevêjeksiniz
sevêjekler

Example of omitted S.

kitabından
ykyuy



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14

2



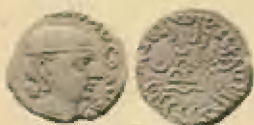
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34



4



5



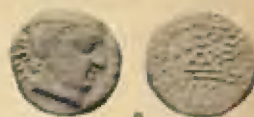
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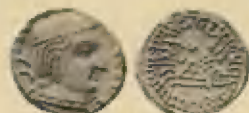
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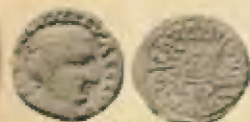
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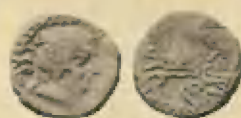
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[illegible]

ART. XIII.—*The Western Kshatrapas.* By PANDIT BHAGVĀNLĀL INDRAJĪ, Ph.D., M.R.A.S. Edited by E. J. RAPSON, M.A., M.R.A.S. (British Museum), Fellow of St. John's College, Cambridge.

EDITOR'S PREFACE.

[“THIS is my last contribution to Indian archæology. It contains views which I have arrived at after a careful and continuous study, extending over twenty-six years, of the Kshatrap coins and inscriptions.”¹ These were among the last words of Pandit Bhagvānlāl Indrajī, who almost up to the day of his death was engaged in completing the article now published. His death in March, 1888, was a real loss to Indian archæology. The tributes paid to his memory by Prof. Peterson in the *Academy*, by Dr. Bühler in the *Indian Antiquary*, by Mr. Javerilal Umiashankar Yajnik and Dr. Codrington in the *Journal Bombay Asiatic Society*, testify to the esteem in which he was held, both as a man and as a scholar, by those who knew him.

The Pandit's papers were transmitted to me by Prof. Peterson in January, 1889, soon after the arrival of the collection of coins and the inscribed “Lion-capital” bequeathed by him to the British Museum. Of this much-prized accession to the National Collection, I gave a short account, illustrated by coins selected by the Pandit himself, at a meeting of the Royal Asiatic Society in February, 1889.

My task as editor has not been altogether an easy one. The manuscript was written by Mr. Vithalji Keshavji Drivedi from the Pandit's dictation in Gujerati. To prepare a paper thus written for publication, much rearrangement and much condensation were naturally necessary; but I trust that I have, at least, succeeded in accurately reproducing the Pandit's views. The substance

¹ Quoted from the “Memoir of the late Pandit Bhagvānlāl Indrajī,” by Javerilal Umiashankar Yajnik, in the *Journal Bombay Branch R.A.S.* for 1889.

of the article is entirely his, while the form is to a great extent mine.

The present paper forms but a portion of the manuscript which I undertook to edit. The remainder, which deals with the history and coinage of the Northern Kshatrapas, illustrated by the inscriptions on the Lion-capital, will I hope be ready for publication at an early date. E. J. RAPSON.]

The term *kshatrapa* was, no doubt, introduced into India from Parthia. It is never found in Sanskrit literature; and, as found in inscriptions and on coins, it is doubtless nothing more than the Sanskrit form of the Old-Persian *khshatrapa*, with the primary meaning of "chief of the military order." The title was specially applied to those chieftains, who were deputed by their sovereign or overlord to rule over certain portions of his territory; and its use seems, in some instances, to have been continued, even after such chieftains had become sufficiently powerful to assert their own independence.

The two most important lines of satraps in the early history of India are those which I have called the Northern and the Western. The former ruled in Northern India during the first century of the Christian era, and their territory may be approximately described as extending from the valleys of the Himālayas on the north, as far as Muttra and the junction of the Ganges and Jumna, or perhaps somewhat farther south. The coins of this dynasty were first described by Prinsep in the Journal of the Asiatic Society of Bengal.¹ They were subsequently noticed by Sir Alexander Cunningham in his paper on "The Buddhist Satraps" published in the same Journal in 1856; and again in the third volume of his Reports of the Archaeological Survey of India. My discovery at Muttra of the Lion-capital, which is covered with inscriptions relating to this dynasty, has since enabled me to throw further light on the subject.

The other dynasty of Kshatrapas held sway, from the last quarter of the first century A.D. to the end of the fourth, over a large territory in Western India, which may be said,

¹ Vol. vii. p. 1051.

generally speaking, to have comprised Mālwa, Sind, Kacch, Kathiāwād, Gujarāt proper, and the northern Konkan. These princes have hitherto been more generally known as the Sāh kings, or as the Satraps of Surāshṭra. The former of these names arose from a mistaken reading of the name *Simha* caused by the fact that the vowels are often omitted in the coin-legends. The other designation, "Satraps of Surāshṭra," is inadequate. Surāshṭra was one province only of the kingdom, and it seems probable that a deputy-governor of this province bore the title Satrap at the same time as the chief governor ruled the whole kingdom with the title Great Satrap. I prefer therefore to call these princes simply the Western Kshatrapas. The labours of Prinsep, Newton, Thomas, and others, have made the coins of this dynasty better known to us than those of the Northern Satraps.

The first of the Western Kshatrapas is Nahapāna, who is called on his coins a *Kshaharāta*. This appears to be the Sanskrit form of the Prākṛit *Kharaoṭha*, which we find used as the family or tribal name of a dynasty ruling at Muttra. It appears in the inscriptions on the Lion-capital, and also on a class of coins first read by Sir A. Cunningham—the coins of the Satrap Artas, the Kharaoṭha. It moreover occurs in the form *Chhaharāta* on the Taxila copper-plate dated in the 78th year of the great king Moga. If then Nahapāna's title *Kshaharāta* is the same as *Kharaoṭha*, we have here a connecting link between the Northern and Western Kshatrapas.

From information afforded by the inscriptions on the Lion-capital and other sources, we seem justified in supposing that, about the middle of the first century A.D., a Çaka general named Kusula Patika had gained the overlordship of all the tribes in Northern India.¹ The Kshaharāta dynasty, among others, yielded to him; and it is not improbable that Nahapāna may have been a younger member of the deposed family, who entered Patika's service and was despatched by him from Muttra to attempt the conquest of the Deccan. We know from Nahapāna's

¹ [This point will be discussed more fully in the Papdit's paper on the Northern Kshatrapas.—E. J. B.]

inscriptions that he attacked and defeated the Çātakarni king of the Deccan; and deprived him of a large portion of his territory. Inscriptions also teach us that Nahapāna held possession of a portion of the Deccan or Mahratta country, the Northern Konkan, some portion of Gujarāt proper, and Surāshtra, or Kathiāwād and Kacch.

It seems to me probable that the Çaka era, commencing 78 A.D., was inaugurated by Nahapāna to commemorate his victory over the Çātakarni king, and named in honour of his Çaka overlords. It is almost certain that all the dates of the Western Kshatrapas, whether on coins or in inscriptions, are recorded in years of this era.

In addition to the coinage, we possess the following sources of information about Nahapāna:—three inscriptions of his son-in-law Ushavadāta (Rishabhadatta), and two of his daughter Dakshamitrā at Nāsik; one of Ushavadāta at Kārle; and one of his minister Ayama at Junnar.¹

The dates of these inscriptions range from the year 41 to the year 46; so that, if our supposition that the Çaka era was founded by Nahapāna be correct, his reign must have been a very long one. The way in which he is spoken of in the inscriptions seems to show that he was a powerful and independent monarch, and that both Ushavadāta and Ayama acted as his deputy-governors in different parts of the kingdom. Neither he nor his son-in-law Ushavadāta seems to have had a son, or some mention would certainly, in accordance with universal custom, have been made of the fact in the inscriptions. This is borne out too by the evidence supplied by the coins. Chashtana, who succeeded to the power of Nahapāna, evidently belonged to a different family.

I. NAHAPĀNA, THE KSHAHARĀTA.

[Kshatrapa: dates on inscriptions 41—46.]

Legend on coins: *Rājñah Kshaharātasa Nahapānasa* (in Nāgarī) = *Rājñah Chhaharātasa Nahapānasa* or simply *Rājñah Chhaharātasa* (in Bactrian Pāli).

Plate, 1 and 1a.

I used to possess four silver coins of Nahapāna; but one

¹ For a full account of these inscriptions see vol. xvi. of the *Bombay Gazetteer*, and the *Archæological Survey of India*, "Kathiāwād and Kacch."

of these, which I obtained from Nāsik, was spoiled in cleaning. I heated the coin, and a silver coating came off from each side leaving only a piece of copper. The face on the obverse of all my coins was so well executed as to fairly indicate the age of the king at the time of striking. The face on the coin just mentioned seemed to be that of a man about 30 years old. Another specimen, procured by me in 1862 or 1863, from Junāgadh for Dr. Bhau Dāji, and published by Mr. Newton, has a somewhat older head, perhaps about 45. A third coin, obtained from a village near Mahmūdabad, has a wrinkled face with a long and wrinkled neck, indicating an age of about 60; while the last specimen, which I procured from Junāgadh, bears a still older type of face with wrinkled cheeks and toothless mouth, and represents the king at about the age of seventy.

The Greek legends on the obverse of these coins can never be read with certainty; but I imagine that they referred to the Çaka overlord of the Kshatrapas. The inscriptions on the reverse are bilingual, but those in Bactrian Pāli are badly executed and not always perfectly legible. The symbols on the reverse are an arrow and a thunderbolt. The occurrence of these symbols on some copper coins, which are found in the coasting regions of Gujarāt and Kathiāwād, and also sometimes in Mālwa, make it probable that these were also struck by Nahapāna. These copper coins bear on the other side the Buddhist symbols, a standing deer and a *dharmachakra*, and also show traces of inscriptions which have not hitherto been deciphered.

II. CHASHTANA, SON OF ZAMOTIKA.

[Kshatrapa and Mahākshatrapa: no dated coins or inscriptions.]

Nāgarī: *Rājnah Kshatrapasa* (or *Rājño Mahākshatrapasa*) *Ghamotikoputrasa Chashtanasa*—Bactrian Pāli *Chatshanasa*. Pl. 2.

Our information concerning Chashtana is derived entirely from his coins and from the inscriptions of his descendants. He is the first of a family of Satraps and Great Satraps which continues without a break until the time of Viçvasena (year 221, probably = A.D. 299). After this period the family line

is broken, and there are many gaps which cannot at present be filled up. Chashtāna was evidently not of the same family or tribe as Nahapāna; but there is sufficient similarity in the style of their coins to show that they not only lived at about the same period, but also that they were probably satraps of the same overlord. The name of Chashtāna may possibly denote that he belonged to the Chashta or Chutsa tribe which is mentioned in the Taxila copper-plate grant. He seems to have been the son of a private person, since the name of his father Zamotika has no title prefixed to it. The transcription of this name Zamotika or Xamotika into Nāgarī characters could only be effected by the invention of some compound letter to represent the sound of *z* or *x*, for which no provision was made in the Nāgarī alphabet. The compound *ghs* was therefore employed. We shall find another instance of this in the transcription of the name Dāmazaḍa or Dāmazaḍa, by *Dāmaghaḍa*.

The style of the bust on the obverse of Chashtāna's coins differs from that of Nahapāna's chiefly in the arrangement of the hair and in the form of headdress. Chashtāna has two types of reverse: the first consists of a crescent and a star or rayed-sun; the second has, in addition to these, the symbol which, for want of a better name, has been commonly called the *chaitya* symbol, consisting of a pyramid in the form of three arches and having beneath it a wavy line. This latter type, which seems distinctively Indian, as it is so commonly used on Hindū coins, may have been adopted by Chashtāna when he threw off all allegiance to his overlord, and declared his own independence. It remains the constant type of the Kshatrpa coinage from this time till the dynasty succumbed to the Guptas at the end of the fourth century of the Christian era. Chashtāna is called, on his coins, sometimes Kshatrpa and sometimes Mabākshatrpa. He was probably to some extent contemporary with Nahapāna, and, like him, the general of some Ṣaka sovereign; but while Nahapāna held Surāshṭra and the adjacent districts, Chashtāna would seem to have conquered a great part of Western Rājputāna and to have established himself at Ajmere, where the greater

number of his coins are found. Subsequently he seems to have conquered the kingdom of Mālwa and fixed his capital at Ujain; there can be no doubt that he is identical with the *Τιαστανός* mentioned by the geographer Ptolemy as ruling in this capital. After the death of Nahapāna, who had no son, Chashtāna seems to have succeeded to his dominions; and the Kshatrapa kingdom for the future may be described as comprising the territories conquered by these first two satraps. The title Mahākshatrapa would seem to indicate this increase in the power of Chashtāna, and at the same time to denote his independence of any overlord. We may conjecturally place Chashtāna's reign as lasting from about the year 33 to about the year 58 (c. 111—c. 136 A.D.).

III. JAYADĀMAN SON OF CHASHTĀNA.

[Kshatrapa: no dated coins or inscriptions.]

*Rājñah Kshatrapasa*¹ [*Seāmi*] *Jayadāmāsa*. Pl. 3 and 3a.

All the genealogies given in the Kshatrapa inscriptions hitherto discovered teach us that Jayadāman was the son of Chashtāna. I have not yet been able to obtain an undoubted specimen in silver of this prince; but I think it probable that the specimen given in the Plate is a coin of Jayadāman, although the name and the greater part of the legend cannot be read. The coin is in many respects like those of Nahapāna; both style and letters are similar, and the beginning of a legend in Bactrian Pālī is clearly legible. The symbols are, however, those inaugurated by Chashtāna, and the word *Kshatrapasa* is beyond doubt. It cannot possibly be a coin of Nahapāna.

The copper coins of Jayadāman are well known. They are square, and bear on the obverse an Indian bull facing right, and in front of it a trident and axe combined. Around the obverse are Greek characters—probably the remains of the name of some overlord. The reverse bears the usual symbols and the inscription within a circle.

¹ [*Seāmi* is probably the correct reading of two characters which were apparently overlooked by the Paddit. They appear more distinctly on the specimen published by Newton.—E. J. R.]

Jayadāman only bears the title Kshatrapa. This may either mean that the power of some overlord which Chashtana had thrown off was reasserted during Jayadāman's reign; or that Jayadāman had been defeated and reduced by his powerful neighbour, the Çātakarni king of the Deccan.

The Çātakarni king at this period was probably Gotamīputra, one of whose coins, executed in the style of Jayadāman, I found at Sopārā.¹ This particular style of coin seems not to have been imitated by any other Çātakarni kings. We shall have to mention this subject again in our account of the next prince, Rudradāman. The scarcity of Jayadāman's coins seems to show that his reign was not a long one. If we allow five years, the end of his reign will fall approximately in the year 63 (Çaka=141 A.D.).

IV. RUDRADĀMAN, SON OF JAYADĀMAN.

[Mahākshatrapa: inscription dated 72.]

*Rājñah Kshatrapasa Jayadāmaputrasa Rājño Mahākshatrapasa
Rudradāmasa* (sometimes *Rudradāmnah*). Fl. 4.

Jayadāman was succeeded by his son Rudradāman, whose name comes fourth in order in the genealogy of these princes given in inscriptions. Our information concerning him is unusually extensive, thanks to the magnificent inscription engraved on the western side of the rock containing the edicts of Aśoka at Junāgaḍh. From this we learn that he was a powerful monarch, who regained for his family the position which it had lost during the reign of his father.

The inscription, which was executed by order of one of Rudradāman's ministers, who held authority as his deputy over Surāshṭra and Anarta, commemorates the restoration of a large tank, which was first constructed by Pushyagupta, a Vaiçya and brother-in-law of the Maurya king Chandragupta (about 300 B.C.). In the time of Aśoka, the grandson of Chandragupta, this tank had been ornamented and provided with a water-course by a relative of the king's, named Trishāspa, who is also described as a "Yavana," a term

¹ See "Sopārā and Padana."

which must here have the general signification of foreigner. It can scarcely mean a Greek, since the name, like Zorasp, Hystasp, etc., is evidently of Persian origin. For a very long period, probably for about four hundred and fifty years after its construction, the lake seems to have remained in a satisfactory condition. But in the year 72 (Çaka=150 A.D.), on the first day of the dark half of the month Mārgaṣīrṣha, there came a great storm, which caused the tributaries of the lake to overflow, and its embankment gave way. This occurred during the reign of the Mahākshatrapa Rudradāman, who himself undertook the work of restoration.

Together with much eulogy of the usual kind, the inscription records some most important historical facts. Rudradāman is styled "lord of eastern and western Ākarāvātī, Anūpadeça, Ānarta, Surāshṭra, Çvabhra, Maru, Kaccha, Sindhu, Sauvīra, Kukura, Aparānta, and Nishāda," and is mentioned as having won for himself the title of Mahākshatrapa (*svayamadhigatamahākshatrapanāmnah*). The precise meaning of this is not explained; but we may almost certainly infer that a position of independence of some overlord, first asserted by Chasṭana, then lost by Jayadāman, was regained by Rudradāman. This prince is also said to have exterminated the Yaudheyas, and to have twice conquered the Çātakarni king of the Dekhan, whom, however, he released "on account of his near relationship." This Çātakarni was, probably, Gotamīputra Çātakarni; and it is not improbable that the object of Rudradāman's wars may have been, as I have suggested, to avenge a defeat inflicted by this king on Jayadāman.

The events mentioned in the inscription must have taken some considerable time for their fulfilment. On our assumption that Jayadāman ceased to reign in about the year 63, Rudradāman would, at the date of the inscription (72), have been reigning about nine years. In default of any direct evidence on the point, we will suppose Rudradāman to have reigned fifteen years after this date and conjecturally place the end of his reign in the year 87 (Çaka=165 A.D.).

I have not been able to find any copper coins of Rudradāman.

All the silver specimens, of which I possess nine, are made of superior metal and are well executed.

V. DĀMAZAḌA, SON OF RUDRADĀMAN.

[Kshatrapa: no dates.]

Rājño Mahākshatrapasa Rudradāmaputrasa Rājñah Kshatrapasa
Dāmaghaḍasa (or Dāmajaḍaḥriyaḥ.) Pl. 5.

We find on coins the names of two sons of Rudradāman—Dāmazaḍa or Dāmajaḍaḥri, and Rudrasimha. The coins of the latter, who did not reign for a considerable period after his father's death, will be mentioned below.

As far as I am aware, no scholar has hitherto described the coinage of this Dāmazaḍa. The first two coins which I saw of this prince were sent to me for examination by Mr. Vajeshankar Gaurishankar. A few months after receiving these, I discovered four excellent specimens among a collection found at a village near Kundla in Kathiāwād. The Greek characters on the obverse of these coins are much clearer than on those of any of the preceding monarchs.¹ There being no character for *z* in the Nāgarī alphabet, this sound in the name Dāmazaḍa was either represented by the compound *ghs* (as we have already seen in Zamotika, the name of Chashṭana's father) or by *j*. In the latter case the name is further Sanskritised by the addition of *-ḥri*.

On his own coins Dāmazaḍa is merely called Kshatrapa; but, as he appears as Mahākshatrapa on the coins of his son Jivadāman, we may suppose that he held the superior position for a brief period only towards the end of his reign. Further, as his coins are very scarce, it is probable that his reign as Kshatrapa was a short one.

¹ [The Pandit sees in these mutilated Greek inscriptions traces of the name Liaka Kusula, a name which is known as that of a member of the Çaka family, which seems to have exercised originally a sort of supremacy over the Satraps. The evidence for this is, however, extremely slight. It is scarcely too much to say that no identical or even very similar combinations of these Greek letters are found on different specimens. The arrangement of these Greek characters seems to me quite fantastic; they seem to be merely a reminiscence of the Greek legends on the Bactrian coins from which the Satrap coins were originally copied. The letters ΛΑΚΟ seen on some specimens cannot represent the name Liaka unless we suppose these legends to consist partly of Greek and partly of Roman characters.—E. J. R.]

Subsequently to this period, when the dates on the coins afford us direct evidence, we find that, as a rule, a Mahā-kshatrapa and a Kshatrapa used to reign at the same time. Dāmazaḍa may, therefore, have been an underlord reigning in Surāshṭra during the lifetime of his father. Supposing him to have survived his father seven years, we may approximately date the end of his reign as 94 (Çaka=172 A.D.).

The reverse of one of my coins has been double-struck, the name and titles of Dāmazaḍa appearing twice and completing the circle.

VI. JIVADĀMAN, SON OF DĀMAJAḌA.

[Mahākshatrapa; dated coins, 100.]

Rājño Mahākshatrapasa Dāmajaḍasa putrasa Rājño Mahākshatrapasa Jivadāmasa. Pl. 6.

The next prince is a son of Dāmazaḍa named Jivadāman, who is styled Mahākshatrapa on all his coins. I possess four specimens. One of these was obtained by me at Amreli, in 1863, for Dr. Bhau Dāji, and has since been kindly given to me by his son Mr. Vithal Bhau Dāji. It has been already published by Mr. Newton.¹ Another specimen was lent to me by Mr. Vajeshankar Gaurishankar. I asked him for a loan of this coin, as it bore on the obverse a long inscription in Greek characters. These Greek characters on the obverse are, however, from this period onwards, so fragmentary that any attempt to decipher them is hopeless. They still continued to be copied on all the successive coinages, but any meaning that they once possessed was evidently now quite forgotten.

The coins of Jivadāman are interesting as being the first dated coins of this series. Henceforth, until the close of this dynasty—a period of about 210 years—all well-struck coins bear on the obverse behind the king's head the number of the year in Nāgari numerals.

The only date found on the coins of Jivadāman is 100, and it is possible that the custom may have been introduced by

¹ Journal of the Bombay Branch of the R.A.S. vol. ix. p. 5.

him to celebrate the completion of the first century of the Çaka era.

Two of my coins are dated ; but as the types are different—the “sun” symbol having in one specimen eight, and in the other twelve rays—it would appear that they were struck at different mints.

VII. RUDRASIMHA, SON OF RUDRADĀMAN.

[Kshatrapa : inscription dated 103. Mahākshatrapa : dated coins 103—118.]

Rājño Mahākshatrapasa Rudradāmanaḥ putrasa Rājño Mahākshatrapasa Rudrasimhāsa.

PL. 7.

Rudrasimha, the uncle of the prince last mentioned, was the son—probably the youngest son—of Rudradāman. His earliest coins bear a youthful head without moustache ; while specimens of later date give the moustache, as usually worn by the princes of this dynasty.

Rudrasimha is called Mahākshatrapa on all his coins ; but on an inscription dated 103, which is also the first date appearing on the coins, he is called Kshatrapa. It may be that, until the year 103, he ruled in Sarāshṭra as a simple Kshatrapa, and, towards the end of that year, either drove his uncle Jivadāman from the throne, or succeeded him on his death as Mahākshatrapa.

The inscription referred to was found by Major J. Watson near the village of Gūnda in the Hālār district of Kathiāwād. It is about 2 ft. 2 in. long and 10 in. wide, and is dated on the 5th day of the bright fortnight of the month Vaiçākha in the year 103. Dr. Bühler, who has published and translated this inscription,¹ supposes it to commemorate the sinking of a well ; but I believe it to refer to the construction of some public building, the precise name of which is lost, as the letters are, at this point, undecipherable. I would therefore suggest, in place of Dr. Bühler's rendering, that the translation of the latter part of the inscription should be as follows :—“The Ābhīra General Rudrabhūti, son of General Bābaka, built

¹ Indian Antiquary, vol. x. p. 167.

... at the village of Rasopadra, for the benefit of all living creatures."

The inscription gives a genealogy of four names in direct succession from Chashtaṇa to Rudrasimha; but no reference is made to the brother or nephew of Rudrasimha—Dāmajaḍa and Jivadāman—who, as we have seen, also reigned. No significance need, however, attach to this omission, since it is the rule in these genealogies to give the direct succession only. They are, in fact, family as opposed to dynastic lists.

A similar genealogy of Rudrasimha is afforded by an inscription discovered by Dr. Burgess, while excavating in a cave near the Bavapyara hermitage at Junāgaḍh. This has also been edited and translated by Dr. Bühler.¹

I possess thirty coins of Rudrasimha, all in excellent preservation, and twenty of them bearing distinct dates as follows: four, 103; one, 107; two, 108; three, 110; three, 112; two, 113; one, 114; one, 115; one, 116; two, 118.

The dates on these coins have prefixed to them symbols which differ in different specimens. Sometimes we find one perpendicular line, sometimes two, and sometimes a dot. Two specimens have CO, one OC, and one VO. I cannot say if these symbols have any meaning. They may, perhaps, be numerals of some kind, or the remains of some word meaning year.

A curious coin in my possession affords some ground for supposing that the reign of Rudrasimha may have been interrupted by some son of his brother Dāmajaḍa. The obverse bears a well-executed bust of Rudrasimha with the date 118—the latest borne by the coins of Rudrasimha—while the reverse has been double-struck, the legend *Rājño Mahākshatrapasa Dāmajaḍasa putrasa* appearing twice. It may be that some son of Dāmajaḍa, whose name we are prevented by an accident from knowing, deprived Rudrasimha of his throne and restruck his coins. There is, however, no other evidence of such a fact.

¹ Arch. Surv. West. India, "Kathiāwād and Kooch," p. 140, pl. xx. fig. 1.

VIII. RUDRASENA, SON OF RUDRASIMHA.

[Mahākshatrapa: inscription dated 122; dated coins, 125-142.]

Rājño Mahākshatrapasa Rudrasimhaputrasa Rājño Mahākshatrapasa Rudrasenasa. Pl. 8.

Rudrasimha was succeeded as Mahākshatrapa by his son Rudrasena, possibly, as we have seen, after an interval caused by an interloper.

The earliest date found on the coins of Rudrasimha is 125, but, from an inscription on a stone slab found at the village of Mūliasar, we learn that he was reigning in the year 122. There is also another inscription of this king, which was discovered by me at the village of Jasdan in Kathiāwād. An eye-copy and transcript of this inscription was sent by me to Dr. Bhau Dāji, who, with the aid of Shastri Pāndurang Pādhyā, published it in the Journal of the Bombay Asiatic Society.¹ This inscription gives us a genealogy of the usual form from Chashtapa to Rudrasena. Unfortunately, the date is not certain, the unit-figure being indistinct.

Of the 41 coins of Rudrasena in my possession, 23 afford dates as follows: one, 125; two, 130; one, 132; four, 134; two, 135; two, 136; seven, 138; three, 140; one, 142.

In the case of Rudrasena, too, the face on the earlier coins is without moustache, from which we may infer, as in the case of his father, that he came to the throne at an early age. One of the coins in my possession has been struck on the top of another specimen, thus having the king's bust in relief on one side and impressed on the other. Other instances of the same kind are known, and it is believed that one coin in a thousand was purposely struck in this way.

IX. SAṄGHADĀMAN, SON OF RUDRASIMHA.

[Kshatrapa: date? Mahākshatrapa: dated coin 144.]

Rājño Mahākshatrapasa Rudrasimhasa putrasa Rājño Mahākshatrapasa Saṅghadāmasa (also *Rājñash Kshatrapasa Sañ°*). Pl. 9.

On a coin belonging to the Naeb Dewan of Bhaunagar, Saṅghadāman bears the title of Kshatrapa; and it is not

¹ Vol. viii. p. 224. [A revision of this has since been made by Dr. Hoernle. —*Ind. Ant.* vol. xii. p. 32.]

unlikely that he held the position of Kshatrapa of Surāshṭra during the lifetime of his brother Rudrasena, and succeeded to the higher title on his death. The date of this coin is unfortunately obliterated.

The coinage of Saṅghadāman is extremely rare, and I have in my own possession only one specimen, which was obtained from Amreli in 1862, and given to Dr. Bhau Dāji. This was published by Mr. Newton in his third paper.¹ Mr. Newton, however, failed to read the legend correctly, and supposed Saṅghadāman to be the son of Rudrasena. On this coin Saṅghadāman bears the title of Mahākshatrapa. The date is almost certainly 144, although the unit figure is somewhat indistinct. The rarity of Saṅghadāman's coinage seems to show that he reigned but a short time, whether as Kshatrapa or Mahākshatrapa. He probably succeeded Rudrasena about 143.

X. PRITHIVĪSENA, SON OF RUDRASENA.

[Kshatrapa: dated coin 144.]

Rājño Mahākshatrapasa Rudrasenasa putrasa Rājñah Kshatrapasa Prithivisenasa. Pl. 10.

The coin of Prithivīseña which I possess is, as far as I am aware, unique. It is an excellent specimen; the bust and the date on the obverse are in good relief, while the letters of the inscription on the reverse are distinct and well shaped. This coin affords us the only information we have of Prithivīseña. He appears here as a simple Kshatrapa; and we may suppose that he succeeded his uncle Saṅghadāman as Kshatrapa of Surāshṭra when Saṅghadāman succeeded Rudrasena as Mahākshatrapa.

XI. DAMASENA, SON OF RUDRASIMHA.

[Mahākshatrapa: dated coins, 148-157.]

Rājño Mahākshatrapasa Rudrasimhasa putrasa Mahākshatrapasa Dāmasenasa. Pl. 11.

Saṅghadāman (last dated coins, 144) was probably succeeded as Mahākshatrapa by his brother Dāmasena (earliest

¹ Journal of the B.B.R.A.S., vol. ix. p. 6.

coins, 148). I possess twenty-two excellent specimens of Dāmasena's coinage, and of these eleven bear distinct dates as follows: one, 148; one, 150; one, 152; one 152 or 153?; one, 153; two, 154, two, 156; two, 157. In addition to these there is one coin with an indistinct date, which I am inclined to read as 158. This is, however, extremely doubtful; and we can only certainly give the dates of Dāmasena's coins as ranging from 148 to 157.

XII. DĀMAJAḌAÇRĪ, SON OF RUDRASENA.

[Kshatrapa: dated coins, 154.]

Rājño Mahākshatrapasa Rudrasenaputrassa Rājñaḥ Kshatrapasa
Dāmajaḍaçriyaḥ. Pl. 12.

I possess six excellent specimens of the coinage of this Kshatrapa, all of them bearing the date 154. Dāmajaḍaçrī was therefore contemporary with his uncle Dāmasena, the Mahākshatrapa, and probably succeeded—though perhaps not immediately—his brother Prīthivīsenā as Kshatrapa of Surāshṭra.

XIII. VĪRADĀMAN, SON OF DĀMASENA.

[Kshatrapa: dated coins, 158–176 (?).]

Rājño Mahākshatrapasa Dāmasenaputrassa Rājñaḥ Kshatrapasa
Vīradāmaḥ. Pl. 13.

Of Vīradāman's coinage I possess 35 specimens, twelve of which are dated as follows: eight, 158; three, 160; and one 176 (?). There is some doubt as to the last-mentioned date, as the second numeral is very indistinct. From the remains of the cross-stroke which can be seen in the lower portion of the figure we are justified, I think, in reading this numeral as 70; although this reading would give us a very long interval (160–176) for which no dated coins have been found. There is no doubt about the unit figure, which is distinctly 6.

In spite of the length of his reign, Vīradāman never appears as a Mahākshatrapa. His reign as a simple Kshatrapa is, as will be seen below, partly concurrent with the reigns of his brothers Yaçodāman and Vijayasena both as Kshatrapas and as Mahākshatrapas. As might be expected

from the length of his reign, the coins of Viradāman are found in large numbers.

XIV. YAÇODĀMAN, SON OF DĀMASENA.

[Kshatrapa : dated coins, 160. Mahākshatrapa : dated coin, 161.]

Rājño Mahākshatrapasa Dāmasenaputrasa Rājñah Kshatrapasa (or *Rājño Mahākshatrapasa*) *Yaçodāmanah*. Pl. 14.

The coinage of Yaçodāman is scarce, and this fact, as well as the dates on the coins, seems to indicate a short reign of probably only two or three years. The Nāgarī letters on the specimens found are unusually fine. I possess six coins of this prince, two of which are dated 160, and one 161. The dates on the others are illegible. Yaçodāman is called Kshatrapa on the coins dated 160, and Mahākshatrapa on the coin dated 161. The end of his reign can scarcely be placed later than 162, since we find his brother Vijayasena striking coins as Mahākshatrapa in the following year.

XV. VIJAYASENA, SON OF DĀMASENA.

[Kshatrapa : dated coins, 160-162. Mahākshatrapa : dated coins, 163-171.]

Rājño Mahākshatrapasa Dāmasenaputrasa Rājñah Kshatrapasa (or *Rājño Mahākshatrapasa*) *Vijayasenasa*. Pl. 15.

The dates on coins teach us that Viradāman, Yaçodāman, and Vijayasena, sons of Dāmasena, were all Kshatrapas—probably governors of provinces—at the same time; also that Yaçodāman succeeded to the superior title in 161, and Vijayasena in 163. It is probable then that (in spite of the lack of numismatic evidence) their father Dāmasena reigned as Mahākshatrapa until 161, the year he was succeeded by his son Yaçodāman.

Vijayasena's coins are found in large numbers throughout Kathiāwād and Gujarāt. I have 166 specimens, most of them being in excellent preservation. Fifty-four have dates as follows: one, 160; two, 161; four, 162; five, 163; seventeen, 164; two, 165; four, 166; four, 167; nine, 168; five, 170; one, 171. It will be noticed that all the years from 160 to 171 inclusive are represented with the single exception of 169.

Vijayasena is styled Kshatrapa until the year 163, when he assumes the higher title which is found on all coins from that date to the end of his reign. The number of coins dated 164 is especially large. This may be explained if we suppose that he became a Mahākshatrapa late in 163, and struck large numbers of coins to promulgate his new title throughout the following year.

After Vijayasena (last date 171) we meet with no Mahākshatrapa of the same family for a period of five years, when there comes still another son of Dāmasena, named Dāmajaḍaḍṛī, whose coins hitherto deciphered afford only the date 176. These coins of Dāmajaḍaḍṛī differ considerably in style and fabric from their predecessors. The workmanship has degenerated; and this fact, coupled with the interval just mentioned for which we possess no dated coins, makes it not improbable that at this period some disturbance may have taken place in the affairs of the kingdom. Such a supposition might account for certain coins, the fabric and style of letters of which are certainly of this period, but which were certainly not struck by a member of the same dynasty.

XVI. ĪḶVARADATTA.

[Mahākshatrapa: dated coins "first" and "second" year.]

Rājā Mahākshatrapasa ĪḶvaradattasa varsha prathamē (or varsha dvitīye).

Pl. 16.

The coins of ĪḶvaradatta bear on the obverse a bust which is an exact imitation of that of Viradāman or Vijayasena; but that he belonged to a different family is shown, first, by the formation of his name, and, secondly, by the fact that, instead of continuing to record the date by years of the Kshatrapa era in numerals on the obverse of his coins, he starts an era of his own and gives the number of the year in words on the reverse. Two varieties of ĪḶvaradatta's coins have been found dated respectively "in the first year" and "in the second year." They are well struck, and the Nāgarī characters of the inscription are distinct.

The bust on the obverse seems to be imitated sometimes from that of Viradāman, sometimes from that of Vijayasena;

while the reverse bears the customary symbols with a legend of the usual form.

Who this great and independent Mahākshatrapa was is, to a great extent, a mystery; but we have sufficient evidence to admit of our making at least a plausible conjecture. In the inscriptions at Nāsik we find records of gifts made by kings bearing similar names to *bhikshus* living in the caves. These kings were of the Ābhīra tribe. We find, for instance, in inscription 15 of cave 11 (see Bombay Gazetteer, vol. xvi. p. 579) record of the gift of a permanent capital made to the mendicants by a female worshipper named Vishnudattā, a Çakanikā (Çaka lady) "in the ninth year of the king, the Ābhīra Īçvarasena, son of the Ābhīra Çivadatta." These kings date in years of their own reigns, call themselves Great Kings, and appear, from the style of letters in their inscriptions, to belong to a period somewhat later than that of Nahapāna. Who these kings were, and where their capital was situated, is as yet unknown, and the subject requires further investigation. Īçvaradatta was, in all probability, a descendant of these kings, if we may judge from his name and his method of chronology. It appears that these Ābhīras were connected with the Kshatrapas, and, in the inscriptions, some of them are mentioned as commanders of the Kshatrapas' armies. One of them, indeed, seems to have gained considerable power, and to have established himself as a ruler in the Deccan. It is not impossible that Īçvaradatta may have been one of his descendants, who added to the power bequeathed to him, and, having proceeded as far as Gujarāt, assumed the title of a Mahākshatrapa. If so, the Kshatrapa Viradāman remained unmolested all through this period as testified by the dates on his coins.

If we suppose Īçvaradatta to have attained his greatness in the year 171, the last year of Vijayasena, this year (always supposing that the Kshatrapas used the Çaka era) would correspond with A.D. 249, the first year of the Trikūṭaka era, of which Īçvaradatta may quite possibly have been the founder.

XVII. DAMAJAÐĀGRĪ, SON OF DĀMASENA.

[Mahākshatrapa: dated coin, 176.]

*Rājño Mahākshatrapasa Dāmasenaputrassa Rājño Mahākshatrapasa
Dāmajaḍaḍṛiyaḥ.* Pl. 17.

This prince, the fourth son of Dāmasena who struck coins, succeeded his brother Vijayasena as Mahākshatrapa, possibly after an interval during which the interloper Īcvaradatta held the chief power. I possess eight coins of Dāmajaḍaḍṛī, three only of which bear dates. On two of these the numerals for 100 and for 70 can be deciphered, while nothing certain can be said about the units. The solitary specimen, on which the date can be completely read, bears the date 176. The chronology of this prince is, therefore, in a most unsatisfactory state, and neither the beginning nor the end of his reign can be fixed with any certainty.

XVIII. RUDRASENA, SON OF VĪRADĀMAN.

[Mahākshatrapa: dated coins 180-190.]

*Rājñāḥ Kshatrapasa Viradāmaputrassa Rājño Mahākshatrapasa
Rudrasenasa.* Pl. 18.

Dāmajaḍaḍṛī seems to have been succeeded as Mahākshatrapa by his nephew Rudrasena, the son of Viradāman. In spite of the lack of distinctly dated coins, we may therefore perhaps place the end of Dāmajaḍaḍṛī's reign as late as 179. Rudrasena's coins, which are very numerous, are badly executed, and the bust on the obverse is in low relief. Of the 80 specimens in my possession, fifteen bear legible dates ranging from 180 to 190:—one, 180; one, 183; one, 185; three, 186; eight, 188; one, 190.

XIX. BHARTĪDĀMAN, SON OF RUDRASENA.

[Mahākshatrapa: dated coins 200-214.]

*Rājño Mahākshatrapasa Rudrasenaputrassa Rājño Mahākshatrapasa
Bhartīdāmnaḥ.* Pl. 19.

XX. VIÇVASIMHA, SON OF RUDRASENA.

[Kshatrapa: dated coins, 198-203.]

*Rājño Mahākshatrapasa Rudrasenaputrassa Rājñāḥ Kshatrapasa
Viçvasimhaḥ.* Pl. 20.

On one coin, dated 198, *Rājñāḥ Kshatrapasa* (sic) *Rudrasenaputrassa* etc.

After the last dated coin of Rudrasena, 190, an interval occurs for which no dated specimens have hitherto been found. The earliest date of his son Viçvasimha as Kshatrapa is 198, while his son Bhartṛidāman appears first as Mahākshatrapa in 200. The coins of both are common.

I possess 33 specimens of Bhartṛidāman's coins. There are among them a few specimens of fair execution, but most of them are badly struck. Eight of them afford dates: one, 200; one, 203; one, 207; two, 211; one, 212; one, 213; one, 214.

The coins of Viçvasimha are likewise of poor workmanship. The legend is often scarcely decipherable, and the date is rarely visible. Of my 54 specimens, seven only have dates, and these are nearly all indistinct. Two are dated 198; three, 200; one, 201; and one, 203. The great number of Viçvasimha's coins would seem to indicate a long reign; and, in view of the small proportion of dated specimens, and of the long interval between him and Rudrasena, we may perhaps place the beginning of his reign at about the year 193.

XXI. SIMHASENA, SON OF RUDRASENA.

[Mahākshatrapa: no dated coins.]

*Rājño Mahākshatrapasa Rudrasenasa putrasa Rājño Mahākshatrapasa
Simhasenasa.* PL. 21.

XXII. VIÇVASENA, SON OF BHARTṚIDĀMAN.

[Kshatrapa: dated coins, 216-223.]

*Rājño Mahākshatrapasa Bhartṛidāmanah putrasa Rājñah Kshatrapasa
Viçvasenasa.* PL. 22.

The reigns of Simhasena and his nephew Viçvasena, as Mahākshatrapa and Kshatrapa respectively, were probably, for a short time at least, concurrent, if, as is likely, Simhasena succeeded his brother Bhartṛidāman (latest coins 214) as Mahākshatrapa. Viçvasena, as we know from his coins, was reigning at least as early as 216. I have only one specimen of Simhasena's coinage, and on this the date is unfortunately illegible. Nothing certain can therefore be said as to his date. The style of his coin differs considerably from those immediately preceding.

The coins of Viçvasena are by no means rare, but of the

coins found very few bear distinct dates. Of the twenty-nine in my possession only two are dated: one, 216; and one, 223. Viṣvasena appears as Kshatrapa only.

At this period a break occurs in the Kshatrapa dynasty, and we find next a Kshatrapa who does not describe himself as the son of a previous Mahākshatrapa or Kshatrapa.

XXIII. RUDRASIMHA, SON OF SVĀMI JĪVADĀMAN.

[Kshatrapa: dated coins, 231-240.]

Svāmi Jīvadāmaputrasa Rājñah Kshatrapasa Rudrasimhasa. Pl. 23.

In inscriptions the Kshatrapas constantly bear the title Svāmi, but this is its first occurrence on the silver coinage. The Svāmi Jīvadāman mentioned as the father of the Kshatrapa Rudrasimha may perhaps belong to a younger branch of the royal family, and his son may have succeeded as Kshatrapa of Surāshṭra on failure of the direct succession. It is also possible that some foreign prince may have invaded the country and made one of his officers Kshatrapa. A change in the style of coinage, an improvement in fact, might seem to indicate a change of dynasty. I have fourteen specimens, four with dates: one, 231; one, 233; one, 234; one, 240.

XXIV. YAÇODĀMAN, SON OF RUDRASIMHA.

[Kshatrapa: dated coins, 240.]

Rājñah Kshatrapasa Rudrasimhasa putrasa Rājñah Kshatrapasa Yaçodāmanah.
Pl. 24.

Of the five coins which I have of this prince, three bear the date 240; the others are illegible. It will be noticed, therefore, that the only date known on Yaçodāman's coins is the last found on those of his father Rudrasimha. As his coins are rare, Yaçodāman probably reigned only a short time.

XXV. SIMHASENA, SISTER'S SON OF RUDRASIMHA.

[Mahākshatrapa: no dated coins.]

Rājño Mahākshatrapasa Svāmi Rudrasimhasa Rājño Mahākshatrapasa vaspiyasasa Svāmi Simhasenasa.
Pl. 25.

This curious coin, which I believe to be unique, has no date. We are consequently at a loss to know where to place

this sister's son of Rudrasimha. If there is any meaning in the title Mahākshatrapa assumed by this prince, and also given to his uncle Rudrasimha, who never claims it for himself, Simhasena may have been contemporary with Yaçodāman, son of Rudrasimha. He may also perhaps have succeeded Yaçodāman as a simple Kshatrapa, and subsequently won for himself the higher dignity. For some considerable period previous to this, the title of Mahākshatrapa does not appear on the coins. The last instance was that of Simhasena son of Rudrasena, whose solitary undated specimen gives us no information as to his age. The last *dated* specimen of a Mahākshatrapa coin was that of Bhartridāman in 214. This fact, together with other indications, *e.g.* the degradation of the coinage, would lead us to suppose that the dynasty had suffered some diminution of power. The resumption of the title Mahākshatrapa may either mean that this loss had been retrieved, or it may be only another instance of the fact that pompous titles are often used as a consolation for the loss of real power.

XXVI. RUDRASENA, SON OF RUDRADĀMAN.

[Mahākshatrapa: dated coins, 270-298.]

Rājño Mahākshatrapasa Svāmi Rudradāmoputrassa Rājño Mahākshatrapasa Svāmi Rudrasenasa. Pl. 26.

We here learn the name of a Mahākshatrapa of whom no coins have been found—Svāmi Rudradāman, the father of Svāmi Rudrasena. He probably succeeded Simhasena, but it is quite impossible to say what relation he bore to him.

The coins of Svāmi Rudrasena are fairly common. I have 54 specimens, fifteen of which are dated as follows: two, 270; one, 280; one, 284; one, 287; two, 288; one, 290; four, 292; one, 294; one, 295; one, 298. The large gaps which we find in the dates of the coins all through this period seem to bear evidence to some disturbances in the kingdom. The long interval between 270 and 280 may perhaps be thus explained.

XXVII. RUDRASIMHA, SON OF SATYASIMHA.

[Mahākshatrapasa : dated coin 310.]

Rājño Mahākshatrapasa Svāmi Satyasimhassa putrasa Rājño Mahākshatrapasa Svāmi Rudrasimhassa.

Pl. 27.

In this case too the Mahākshatrapa Satyasimha would seem to be known only by the mention of his name on the coins of his son Rudrasimha. I have five coins of Rudrasimha, but the date cannot be read on any of them. Both Dr. Bühler and Sir Alexander Cunningham, however, state that they have seen specimens of this prince bearing the date 310.

These coins are the latest of the dynasty of the Western Kshatrapas hitherto found, and it is not unlikely that Rudrasimha, the son of Satyasimha, may have been actually the last prince of his line. The last known date, 310, of the Çaka era, would correspond to A.D. 388; and we know that the Western Kshatrapas were conquered by the Guptas during the reign of Chandragupta Vikramāditya about the year 90 of the Gupta era, i.e. about A.D. 409.

CORRESPONDENCE.

1. LE THÉÂTRE PERSAN.

June 10, 1890.

SIR,—M. Montet's letter in the April Journal is one of considerable interest—involving no less important a question than the regeneration of Persia. There is much that could be said or written in support of the views enunciated, but I will confine my remarks to a brief comment on his theory of the Religious Drama in contradistinction to the very secular "Comédies" of Mirza Fath 'Ali.

I fully agree with him in his assertion that "la religion est le souverain bien de l'homme : " also that the *ʿazîya* " peut, sous l'influence de circonstances que nous ne saurions prévoir, circonstances religieuses avant tout, devenir le point de départ d'un mouvement patriotique, d'un relèvement national, d'une rénovation sociale." Moreover, that the particular plays recently translated from the Turkish, "n'appartiennent qu'indirectement au théâtre persan, d'autant plus qu'elles ne paraissent point avoir été jouées en Orient, où elles n'ont eu qu'un médiocre succès de lecture ;" and "ne sont qu'une imitation, un pastiche, des comédies européennes."

But what is the probable reason why these plays have not been acted, nor the teaching of them encouraged in Persia? May it not be that they touch too keenly the sore points of the Persian character, and interpret too plainly the national vanity which kills every germ of enlightenment obtained from outside influences? They lay bare for the first time in Oriental literature a painful Truth, acquaintance with which is the first step to reformation. My humble opinion is that a drastic treatment such as this would open the minds of the

more simple-minded native to the wretched shams which he has been taught to acknowledge as Justice and equitable government, and to the real character of those whose decisions he has been trained to respect and obey—consequently, to the consciousness of power to rise from his self-imposed abasement and become a free and thinking creature.

The religious drama, unlike the teaching of Western Christianity, has nothing to impart to its student *regarding himself*; nor does the sympathy evoked in his breast for the first martyrs of his Faith find vent in practical relief of the distress of his fellow-men, or cause him to give attention to his surroundings, and see whether he can suggest a remedy for their bodily wants and moral shortcomings. If Mirza Fath 'Ali's plays do not attempt high teaching, they are at least suggestive of a healthy innovation, which many Persians now living are capable of turning to good account, both for themselves and their countrymen. As to their value for English students of the language of S'adi and Háfiz, I can only express my belief that nothing can approach them in usefulness for colloquial purposes among all the books hitherto recognized by the Government of India.

F. J. GOLDSMID.

The Secretary of the Royal Asiatic Society.

2. DERIVATION OF THE WORD "GANGA."

SIR,—I suggested in p. 542 of the present Number of the Royal Asiatic Society's Journal the possibility of there being some connection between the ancient name of Bengal, Vanga, the river Veh of the Zendavesta encircling the sacred land of the Aryans, and the goddess Ashi Vanguhi; and further pointed out that it might be possible that the Kuṣikas of Irān, when they settled in India, should have extended their sacred Veh or boundary river from the Indus to the Ganges.

It has since occurred to me that a further argument in support of this contention might be derived from the name of the sacred river Guṅgā.

The name Guṅgā appears among a list of goddesses in Rigveda ii. 32. 7, in the form Guṅgū (Grassmann, Rigveda, vol. i.

p. 223), where it is said by Sāyana to mean the full moon, and again in Rigveda x. 48. 8, where Indra is said to have led the Atithigwa (a name of the Tṛtsus) to the Gaṅgū, and here it must mean the river.

Grassmann derives Gaṅgū from "gam" to go, and the name is usually said to mean "the goer." But the termination "gu," which is a Dravidian nominal suffix, seems to point to a Dravidian origin of the name, and neither the Maghas, the sons of the great Akkadian goddess, the mother earth, nor the sons of Kuš, who were the joint rulers of the Gangetic valley, spoke an Aryan language.

The derivation of the name of the sacred river, the mother-goddess of the Hindus, from the root "gam" to go, seems unmeaning, nor is there any apparent reason why a name meaning the "goer" should be transferred to the full moon; but if we turn to Akkadian roots, which must have suggested the name given to the sacred river by the Akkadian Maghas, we find the root "gan" to enclose, which as a noun is applied in the Bible to the Garden of Eden. This, as the sacred garden of God, answers to the Vara of Yima in the Zendavesta, where the seeds of life are sown and is called Gan-Edin. The root "gan" would, with the addition of the Dravidian nominal suffix, as in Bhrigu, where "gu" is added to the root "bhṛi," mean the encloser, or the sacred mother who enclosed in her womb the holy land, which was first sacred to the mother of the Maghas, and afterwards to the moon-goddess, the special patron of the sons of Kuš, who was made by them the measurer of the year.

J. F. HEWITT.

The Secretary of the Royal Asiatic Society.

NOTES OF THE QUARTER.

(April-June, 1890.)

I. GENERAL MEETINGS OF THE ROYAL ASIATIC SOCIETY.

21st April, 1890.—Sir THOMAS WADE, President, in the Chair.

The election of Dr. Bang as a non-resident member of the Society was announced to the meeting.

Professor Sir M. MONIER-WILLIAMS read the paper, a full report of which is published in this Number. After a discussion, in which Mr. Thornton, Professor Bendall, Mr. Lyon, and Mr. Hyde Clarke took part, it was resolved to request the Council to appoint a Committee chosen from all members of the Society to consider the best method of carrying out the proposals put forward by the lecturer.

19th May, 1890.—The anniversary meeting of the Society was held on Monday, May 19, at the premises of the Society, 22 Albemarle Street, London, W., Sir Thomas Wade, the retiring President, taking the chair at the commencement of the proceedings. Among the other members present were the Right Hon. the Earl of Northbrook, G.C.S.I., F.R.S., the Right Hon. the Earl of Powis, LL.D., D.C.L., the Right Hon. Sir M. E. Grant-Duff, G.C.S.I., F.R.S., Major-General Sir H. C. Rawlinson, G.C.B., D.C.L., F.R.S., Sir Monier Monier-Williams, K.C.I.E., D.C.L., Gen. Robert Maclagan, R.E., F.R.S.E., and Mr. Howorth, M.P.

The election of Mr. L. van Deventer as a non-resident member was announced to the meeting.

The SECRETARY having read the minutes of the last meeting,

The CHAIRMAN said: To proceed at once to the business part of our proceedings, I am delighted to report that the Society's condition, although not triumphantly prosperous, is exceedingly healthy. We have a larger number of members than we have ever had since the foundation of the Society, namely, 441, including 27 honorary members. On the 1st of June there will be published, for the first time, a list showing the proportions of the different classes of members, resident and non-resident, ordinary and honorary. The absence of that information makes it somewhat difficult properly to estimate our present position from a financial standpoint, but I may state with confidence that we have a respectable credit. Our income, as you are aware, is made up of a Government grant of £200, of subscriptions from members, and of profits resulting from the publication of our Journal. We supply copies of the Journal to members, but large numbers are taken in addition by public libraries and other institutions. In regard to the Journal, a considerable improvement has been effected in the system of publication adopted, especially as affects the advertisement branch. Formerly we received only half of the proceeds of the sale of the Journal; we now receive 90 per cent. And whereas formerly we received nothing for advertisements, we now get £100 a year. Under the new rules non-members are allowed to subscribe to the Society's Journal, an innovation intended chiefly to accommodate libraries. Under this arrangement eleven libraries have already been entered in the list of subscribers, seven of which joined in the course of the financial year now under review, while thirty-seven subscriptions were received from various booksellers on behalf of other libraries. It is hoped that this source of our receipts, which is always so encouraging, will steadily grow in the future. As to our balance-sheet, we are out of debt, and have nearly the same amount to our credit as last year, and this although we have already paid the expenses of five quarters' publications. We have been in the habit, at least for the past few years, of not paying these expenses of our October quarter until the following January. This year, by paying five quarters in one year, we have put

ourselves right, so to speak, with our publishing account, and, as I have already said, our balance-sheet, compared with that of last year, is none the worse for it. Our income is, in round figures, some £1350 a year, and our expenditure about £1300.

In that expenditure our chief item is that of printing, which runs away with about £600 a year. Our next item in degree of importance is rent; but, thanks to our sub-tenants, we have really paid for our accommodation in this building only £140 a year net. The lease of our present premises expires in September, 1891, and of course we have been very anxiously considering whether we should do better to remain where we are, or to obtain other premises. In considering this question we have had to bear in mind a number of points; amongst others, whether premises in another situation would be equally attractive and convenient for the majority of our members; and, again, whether we should obtain the same opportunities of sub-letting as we enjoy at present. These enable us, as I have already stated, to indemnify ourselves to a certain extent for the outlay incurred in the shape of rent. These and other questions have all had to be carefully considered, and four gentlemen accordingly undertook to make inquiries in different directions with a view to discovering premises suitable and obtainable for our purposes. Their reports on the whole must, we think, be pronounced unsatisfactory; so far unsatisfactory, at any rate, as to incline us strongly to retain our present premises if we can manage to come to terms with our ancient landlord, who himself is the tenant of the Royal Institution. He wishes to raise our rent some 33 per cent., a portion of which increase of course we might hope to recover from our sub-tenants. The whole matter is at present under consideration, though I myself certainly feel pretty certain that we shall be well advised to remain where we are if possible. One very strong argument for remaining here lies in the prospect to which I shall presently refer of our being able to obtain more space upon special occasions for special purposes.

Before going into this, however, I should like to remind

you what our constitution precisely is. We are a Society "instituted for the purpose of investigating the Arts, the History, and the Literature of Asia; and of facilitating intercourse with Eastern peoples by an accurate interpretation of their customs, their feelings, and their beliefs." That is the end of our constitution as formulated in our rules; but in point of fact we have cast our net over an even wider field than that here indicated. We have dealt with subjects which can by no means be considered as strictly within the scope of Asiatic studies. We have had one paper read upon Bushmen. I myself am engaged at this moment, at the instance of a friend, in an endeavour to ascertain whether in centuries back a Chinese settlement may not have existed in Mexico; while in the investigation of the possible ethnological relations of the Japanese to the inhabitants of the South Sea Islands, and other kindred questions, I shall be somewhat surprised if we do not shortly find ourselves fairly launched upon the Pacific Ocean.

Now as regards our labours as a Society of Orientalists, both my immediate predecessors, Sir William Muir and Sir Henry Yule, I have heard complain, during their presidencies, of the torpor of the Society and, generally, of the comparatively little effort made in the advancement of what, for want of a better word, may be called Orientalism. Their complaints, I am bound to admit, were by no means altogether unfounded; in fact they were perfectly justified. Considering the vast interests of England in the East, our show of work is sufficiently moderate in bulk. At the same time it is none the less a fact that our number of members is increasing, and that the circulation of our Journal is increasing; the latter circumstance being necessarily and obviously due to the value of the papers which are read before the Society. I do not mean to contend that these papers are all of equal interest, but I think I may say that during those years during which I have had intimate knowledge of the Society, I have not seen a trivial paper, nor any paper which has not had a certain value either as informing or suggestive. I venture to name, as entitled to our gratitude upon one or other of

these grounds, Mr. Howorth, M. de Harlez, Mr. G. Bertin, Dr. Duka, Professor Sayce, Mr. Edward Oliver, Mr. Vincent Smith, and, lastly, Mr. Browne, who has farther, at his own expense, made a special pilgrimage to Acre, in order to beat up the last of a particular family of Babis, from whom he expected to obtain, and has I believe obtained, important information.

I would here venture to impress upon those who are so good as to provide us with papers, the great importance of appending to them maps and chronological tables. I think that we are greatly indebted, for instance, to Mr. Hewitt for the map accompanying his account of the ancient history of India; while appended to the paper of Mr. Browne, on the Babis, there is a set of chronological tables which are really an epitome of the whole history of that curious sect.

In addition to the papers read, our activity has been shown further in one or two special directions. We have a Committee struggling,—I won't say desperately, but at any rate energetically,—to reconstitute the Translation Fund, for which at one time in my recollection this Society had acquired a certain celebrity. We have abundant will, I think, to revive this work of translation, and no one can doubt that there is plenty of material awaiting the translator. Unfortunately there are not many who are willing to undertake work which, to be useful, must be published, and the publication of which involves what is certainly one of the most expensive of printing operations.

We have another Committee particularly interested in a subject to which reference was made just now in the minutes read by the Secretary,—that of the transliteration of the Asiatic languages in such a way that there shall be arrived at an understanding common to all nationalities. Some of my friends are so sanguine of success as to expect, or at least to hope, that some system may be devised which will bring back mankind to the happy condition of things some time before the Tower of Babel, when the whole earth was of one speech and language (laughter). I am myself not so sanguine.

When I look to the exceeding difficulty experienced in

harmonizing the orthographies of even one national tongue, I feel that we are as yet a long way from a language common to many peoples, and I would deferentially suggest that whoever acts as a member of the Committee, or as one of its coadjutors, would do well rather to devote himself to the rational subdivision of the larger continents, whether Asia or another, into a number of smaller areas such as might secure, within each, a consensus of orthography that would protect the future reader from the confusion now besetting historical and geographical nomenclature, ancient and modern.

Now to the point that I reserved. The labours of our contributors, whether single-handed or in Committee, provide the papers which, when printed, make our Journals sell, and it may seem somewhat ungrateful if we allow ourselves to state anything in the form of a complaint or criticism regarding them. It is none the less true that our papers, when read, do not succeed in drawing crowded houses. As a rule, the number sufficiently interested to sit out the reading of an ordinary paper, and discuss the matter afterwards, is exceedingly small. We need something apparently which either in matter or form shall be more generally acceptable. We look with envy upon the popularity of our great neighbour, the Geographical Society, whose benches are never empty, and popularity being a most effective means to the end which the existence of this Society has in view, it has occurred to the Council that we should do wisely were we to enliven the monotony of our routine by the delivery of sessional lectures. We have even gone so far as to obtain a promise from Prof. Max Müller that he will open the way for us in this direction.

We had already considered the propriety of breaking with our ancient habit of dealing with business the same day as we read papers. The result of this latter custom, we had been led to conclude, was rather disastrous to our business. We allowed ourselves but one hour before the meeting assembled for its scientific work, in which to get through the subjects on our agenda paper, and it has necessarily happened that if any unusually thorny question were before us for discussion, it had to be either hurried through or else postponed for

consideration at a subsequent meeting. The Council has therefore determined for one year, at all events, to try the plan of alternate meetings; business being taken at one and papers being read at the other. We meet some eight times in our sessional year of eight months, and it has been decided that we shall devote four of our eight meetings to Oriental business and four to administrative matters. By this time twelve months we shall see what the experiment is worth.

To return to the lecturing question, we have, as I have just stated, so far committed ourselves as to ask Professor Max Müller to promise us a lecture, and I am glad to repeat that he has very kindly done so.

And now as to the place of its delivery. By authority of Council I have called on Sir Frederick Bramwell, the distinguished Secretary of the Royal Institution, to ask if it might be possible that upon the rare occasions on which we should desire it, we might have the use of the Royal Institution Theatre for the delivery of such lectures. Of course Sir Frederick Bramwell could not venture to promise me anything, but he requested me to formulate the proposals of the Society, and readily consented to lay them before the managers of the Royal Institution when next they meet, which will be in the month of June. I can, however, state that in every way, both as regards the general question and as concerns its details, Sir Frederick Bramwell seemed to me exceedingly encouraging in manner. Indeed I do not doubt that we shall have the use of the Theatre, and I believe it not impossible that we shall be able also to communicate between this building and the building adjoining in a way which, I need hardly say, will be most convenient to members.

It has been the desire of several of us before now to endeavour upon occasion to unite our members with those of similar bodies, not only for the formal service, so to speak, of our papers, but in order that those whose studies have more or less in common may have the opportunity of communicating with one another otherwise than precisely in the form of debate; and if we do succeed, as I hope we may, in securing access to the theatre and building adjoining, we shall be able,

with our present accommodation, if we retain it, to have such reunions.

For one particular reason I think it desirable to refer to a matter which I should not otherwise have here noticed ; I mean the Oriental Congress held last year in Sweden. To that Congress we sent delegates, as you know, who were very well received, and who presented upon their return a very interesting report to us. Owing to certain circumstances, however, there was immediately after the Congress some difference of opinion upon the subject of the time and place at which the next Congress should be held. I should not have referred, I say, to this incident had it not resulted in a controversy in which, with more or less directness, our Society has been invited to take a side. One party of Orientalists has proposed that the Congress should be held in London next year, and another has suggested that it should be held at Oxford the year after. As President of this Society I have been invited to declare myself in favour of one or other of these proposals, and to say to which of the two Congresses it would be most agreeable to this Society to send delegates, as on former occasions. I have not, however, conceived that our Society need concern itself with endeavouring to decide which of the rival parties, if either, is in the wrong. Our Society, as I said a little while ago, has other aims than this. We are "instituted for the purpose of investigating the Arts, the History, and the Literature of Asia ; and of facilitating intercourse with Eastern peoples by an accurate interpretation of their customs, their feelings, and their beliefs,"—and I would strongly recommend that, unless deterred by considerations of insurmountable inconvenience, expense, or other cause, wherever an Oriental Congress is held, the Society be represented by its delegates (hear, hear). Our business is Orientalism, and certainly not the quarrels, well grounded or otherwise, of other Oriental Societies (cheers).

I have now very nearly closed the little which I have had to say. But I am bound, before sitting down, to refer to the very great losses which we have sustained during the past year or so by the deaths of Professor Wright, the great

Arabic scholar of Cambridge; Sir Edward Colebrooke, a former president, whose connection with the Society may be spoken of as hereditary; and, lastly, Sir Henry Yule, who seems really to have been present with us but yesterday. For me to praise the work of such men as these would be superfluous; evidence of their industry and learning is to be found in our Journal; but their fame may be said to belong rather to the world than to our Society (hear, hear). In conclusion, I have to request the Society to approve the nomination of the following gentlemen as officers for the new Presidential term and for the coming year:—

President.—The Right Hon. the Earl of Northbrook, G.C.S.I., F.R.S.

Director.—Major-General Sir H. C. Rawlinson, G.C.B., D.C.L., LL.D., F.R.S.

Vice-Presidents.—Major-General Sir A. Cunningham, R.E., C.S.I., K.C.I.E.; Major-General Sir Frederic J. Goldsmid, C.B., K.C.S.I.; the Rev. Prof. A. H. Sayce, M.A.; Prof. W. Robertson Smith, M.A.; Sir Thomas F. Wade, G.C.M.G., K.C.B., M.A.; Prof. Sir Monier Monier-Williams, K.C.I.E., M.A., D.C.L.

Council.—Mr. F. F. Arbuthnot; Sir George Birdwood, K.C.I.E., C.S.I.; Mr. Edward G. Browne; Mr. F. V. Dickins; Prof. Douglas; the Right Hon. Sir M. E. G. Duff; Mr. Theodore Duka, M.D.; Mr. J. F. Hewitt; Sir William W. Hunter, K.C.S.I., C.I.E., M.A., LL.D.; Mr. Henry C. Kay; Lieutenant-General Sir Peter S. Lumsden, G.C.B.; General Robert MacLagan, R.E., F.R.S.E.; Mr. E. Delmar Morgan; Mr. Robert Sewell; and Mr. T. H. Thornton, C.S.I., D.C.L.

Hon. Treasurer.—Mr. E. L. Brandreth.

Hon. Secretary.—Robert N. Cust, LL.D.

Hon. Solicitor.—Mr. A. Hayman Wilson, 3, Westminster Chambers, S.W.

Secretary and Librarian.—Prof. T. W. Rhys Davids, Ph.D., LL.D.

It now only remains for me to lay down the commission which, very strongly against my will and in defiance of all

my deprecations and misgivings, was conferred upon me three years ago,—the office of President of this Society. The Council has unanimously agreed to present to the Society as its new President the Earl of Northbrook, and his Lordship having done us the honour to accept that nomination, I now appeal to the meeting present to justify by acclamation the choice of the Council (cheers).

LORD NORTHBROOK, who, upon taking the seat vacated for him by Sir Thomas Wade, was again loudly cheered, said :

Gentlemen, I must be allowed, in taking this chair, to say again what I said to Sir Thomas Wade the other day when he came to me and expressed the very flattering wish of the Council that I should be placed in this most honourable position, namely, that I feel myself quite unfitted to fill such a post, considering the qualifications of those who have held this office before me—Sir Thomas Wade, Sir Henry Rawlinson, Sir Henry Yule, and many others—men whose attainments in respect of the languages, literature, and antiquities of the East have been undoubted. As I told Sir Thomas Wade, I do not profess to have any such knowledge at all, and I begged him to represent to the Council that it would be far more valuable to the Society to get some one to preside over its deliberations who possessed such qualifications. However, I did not absolutely say that if the Council really considered that I could be of any use to the Society, I would still decline the honour, because, feeling, as I do, a very great interest in the East, and knowing, as I do, the great value of the Society, I felt that I ought not to refuse the honour if pressed upon me by the Council. At the same time, I beg to express to you my acknowledgments of the great compliment which has been paid me, and to ask you to assist me in this position in every way in your power, and also to kindly overlook those deficiencies which I am afraid I shall display in fulfilling this office. It only remains for me to add that, thanking you very much for the honour which you have conferred upon me, I will do my best to advance the interests and aims of the Society during the period for which you have been good enough to elect me to the office of President (cheers).

Prof. Sir MONIER MONIER-WILLIAMS said :—

My Lord, as the oldest member of this Society here present—though I believe there are three others not present who are older than myself, Sir Harry Verney, Mr. B. H. Hodgson, and Sir John Davis, while Sir Henry Rawlinson, whom I am glad to see seated at your side, is perhaps the oldest corresponding member—I rise to propose a vote of thanks to our late Chairman and President, Sir Thomas Wade, for the ability and assiduity with which he has discharged the duties of his office. I have been a member of the Council during the whole period, and I think I have also been a fairly punctual attendant at the meetings of the Society, and I can therefore bear testimony to the tact and diplomatic skill and unfailing courtesy with which he has regulated our discussions at all times; and I may be permitted to tell you that occasionally we had some knotty questions to decide. Not that we have really required much regulation, for I think it may be said of us without boasting that we are a very orderly set of men, and that our discussions as a rule are conducted with great decorum. In fact, I can recall no occasion of any sort or kind upon which our President has had to name any one of us—(laughter)—or to call any one of us to order. Possibly, indeed, we are a little too serious—a little too solemn. Perhaps too we are a little too cold and wanting in enthusiasm; for surely enthusiasm—or a slight dash of enthusiasm—is needed to insure success in everything, even in the study of Oriental philosophy and metaphysics. But at any rate I think we may say of ourselves that we are earnest workers for a common object, which, as stated by our Founder, is to promote the investigation of the Literature and Arts of Asia—an object indeed offering a vast field of research, embracing sometimes, as our late President has just told us, Mexico, Japan, and the South Sea Islands. This no doubt is an enormous area, and when you reflect that it includes the investigation of the manners, customs, institutions, and languages of the most populous portion of the globe—it stands to reason that it must be quite impossible to get a President of such gigantic

attainments as to represent adequately all departments of Oriental learning. We may have one President to represent China, as our late President has done; another to represent Persia, as Sir Henry Rawlinson; another some day to represent Japan; and now in your Lordship we have a President to represent India. The qualities which are required in our Presidents are skill and tact in restraining us from too great discursiveness and irrelevancy in our discussions to which we are somewhat prone. We want, too, influence for the advancement of the aims of the Society. We want also, on the part of our President, sympathy—sympathy with all those who are working for the accomplishment of a common object. I must say that, as a rule, our Presidents have had these qualities, and I trust, my Lord, you will not think me impertinent if I venture to welcome you in the name of the Society upon the occasion of your first occupancy of the Chair, as one who possesses these qualities in an eminent degree, and to express the cordial satisfaction felt by all of us that you have consented to occupy it. Your Lordship has had several distinguished predecessors within our short life of nearly three score years and ten—short, I mean, in comparison with the life of some learned societies, not in comparison, I am sorry to say, with the lives of some learned men. During that time we have had fourteen Presidents, many of whom have been illustrious. Our founder (in 1823), as every one here knows, was Henry Thomas Colebrooke, who was our first Director—not our first President, for he declined that honour upon the ground that our President should be a man of high social position, and I believe that the position of Director was really made for him personally. Of Henry Thomas Colebrooke I will only say that to my mind he appeared to be the very incarnation of scholar-like accuracy—a walking thesaurus, as it were, of Eastern learning, exhaling, so to speak, Oriental learning at every pore (hear, hear). Our first President was the Right Hon. Williams Wynn, President of the Board of Control. I find that we have had only one other ex-Governor-General of India among our Presidents, namely, the Earl of Auckland; and I

notice also that our list contains the names of only two gentlemen who have held, in conjunction with the office of President, the position of Director, namely, Professor H. H. Wilson and Sir Henry Rawlinson, the latter of whom still holds that position most worthily—and may be long continue to hold it! (hear, hear). The portrait of the first of these—my old friend H. H. Wilson, to whom I owe so much—is before you there, gentlemen, upon the opposite wall, and to him indeed we all of us owe a debt of gratitude, the pleasant burden of which we shall have to carry until the day of the dissolution of this Society. I trust that day may never come, but, if it does come, that it may be far distant. You, my Lord, are our fifteenth President, and though I dislike speaking in public of what has happened to myself, yet I venture to affirm that the countenance and encouragement which your Lordship gave to me personally when I was resident at Calcutta in the winter of 1875 and 1876—the period of the Prince of Wales's visit—when I was endeavouring, feebly perhaps, to promote an interest in Oriental studies with the view of establishing an Indian Institute at Oxford, are an earnest and an augury of the benefits which this Society will derive not only from your Lordship's high position, but from your interest in and sympathy with us in our Oriental researches and investigations during your occupancy of our Presidential chair. I conclude by moving a vote of thanks to our outgoing President and to the Secretary and other officers of the Society (cheers).

Sir MOUNTSTUART GRANT DUFF said :

Mr. President, I think the Royal Asiatic Society is very much indeed to be congratulated on having been fortunate enough to secure, upon losing, most regretfully, the services of the eminent diplomatist and scholar who so admirably carried on our relations with that Asiatic country whose friendship is most important to us, to secure, I say, upon losing Sir Thomas Wade, the services of an eminent statesman who excellently conducted during a series of years the affairs of our great Asiatic dependency. I agree most heartily with everything that fell from Professor Sir Monier-

Williams, and I beg to second the vote of thanks which he proposed.

SIR HENRY RAWLINSON said :

I have been requested to add a few words to those which have been already addressed to you, and I rise accordingly to fulfil that duty, but really very little has been left to me to submit to you. Sir M. Monier-Williams and Sir M. Grant-Duff have fully explained the situation, and I have really very little more to do than to record my entire agreement with and approval of their sentiments. Personally I naturally feel a great interest in the Royal Asiatic Society because, if I have succeeded in achieving any reputation in Europe, it has been mainly owing to the support and encouragement which I received early in life from this Society. The Royal Asiatic Society was the tribunal to which fifty-three years ago—in 1837—I first submitted my Cuneiform discoveries in Persia, and from that date to the present I have been in constant communication and association with the Society—have been allowed to refer to the Society's unrivalled stores of Oriental literature, and in short have owed far more to the Society than I can adequately acknowledge. You will readily believe, therefore, that I have always been very much interested in the success of the Society, and that I am exceedingly happy to hear that the Society is now in a more flourishing condition financially than it has been in during any previous period. Like all other things human, the Society has been subject to change. I remember at one time we had nearly exhausted our balance at the bankers, and were diminishing in respect of income year by year. In fact we were exhibiting all the symptoms of a literary atrophy. But owing to exertions upon the part of all of us, and to increased energy and hearty co-operation on the part of the Council, we retrieved our position, and improved it little by little, year by year, until now, under the able direction of our late President, Sir Thomas Wade, and of our Secretary, the Society has reached quite a flourishing position. I think the Council have exercised a very wise discretion in inviting Lord Northbrook to undertake the direction of our affairs. Lord Northbrook, although he

may not be a profound scholar, is yet interested, heart and soul, in the East and Orientalism, and I can assure him that he will receive from the Council the most hearty co-operation and support. Personally, I shall always be most ready to place my services at his disposal, and to render any assistance which he may require in work of a technical or literary kind which he may have to superintend in accordance with the rules of the Society. I do not think, gentlemen, I need say anything more; but before sitting down I should like to express the hope that members will try to throw off a little of the lassitude which seems to have fallen upon us with advancing years—I speak feelingly, because I find that I myself am suffering in this respect—and, putting their shoulders to the wheel, will bring back to, and retain for, the Society that great and world-wide literary reputation which it has enjoyed since the days of Colebrooke and Wilson. We thought ourselves fortunate on a former occasion in having as our President the son of the great Colebrooke. I think we may deem ourselves equally fortunate in having now secured for the same post the services of a man like Lord Northbrook, who has occupied so distinguished a position as that of Governor-General of India, and who is a prominent figure in the literary and political circles of the metropolis (cheers).

Mr. H. H. Howarth, M.P., said:

The concluding words of Sir Henry Rawlinson tempt me to say one or two words. He points out that we now have an excellent balance-sheet, and in other respects are satisfactorily prosperous. But where we fail, to my mind, is in the amount and quality of our work. These are the points in respect of which we fall short when contrasted with foreign Oriental Societies. But this question of the quality and quantity of work performed really depends upon the amount of original material at our disposal upon which work is possible. And I should like to take this opportunity of emphasizing the absolute necessity, if the cause of Oriental study is not to die out in England, of our increasing the amount of Oriental translation done very materially. It is to my mind abso-

lutely essential that we should have at our command a very much greater quantity of original material. Until then it is, I am convinced, useless for us to hope to make that progress which we ought to make. I spent last night with my friend General Sir Alexander Cunningham, and he showed me his collection of gems and coins with so-called Scythic inscriptions upon them. Of the inscriptions upon those coins and gems not one single letter can be read—a fact which seems to me to constitute a perpetual reproach to us and to the progress which has been made since the time when Prinsep succeeded in deciphering so many Indian inscriptions. Here are a series of monuments covering one of the darkest and obscurest periods of Asiatic history—the period preceding the Arab conquests on the Oxus; yet they are not available for study, because no one has yet attempted to master their alphabets, or even—and this is still more astonishing—to publish them. But this is only one branch of a huge subject. And I can only say that I most earnestly hope that during the forthcoming year some real substantial effort will be made to reconstitute our Oriental Translation Fund, and that we shall in the course of a few years put ourselves at least on a level with the Germans and the French in making available for the research of students the vast masses of buried matter towards the investigation of which we have done so little during preceding years (hear, hear).

The CHAIRMAN said :

It has been moved and seconded, gentlemen, that the thanks of this Society be given to the retiring President, Sir Thomas Wade, and to the other officers of the Society. Is it your pleasure that the motion be carried ?

The resolution was passed by acclamation.

Sir THOMAS WADE said :

Lord Northbrook and Gentlemen,—I find it exceedingly difficult to acknowledge in fitting terms the great honour which you have done me, and to reply in a suitable way to the words in which this vote of thanks has been moved and supported by the different speakers. I may add that I feel it was just and proper that in those most flattering speeches

stress should have been laid chiefly upon any services which I may have rendered in my capacity of Chairman, rather than upon any of my contributions towards the attainment of the object which is really the cause of this Society's existence. When the Society, three years ago, did me the honour to make me President, or rather when it proposed to nominate me, I protested upon the simple ground that in the proper acceptation of the term I was not an Orientalist—having acquired that knowledge which I possessed of Oriental literature in a purely empirical manner. For though a man may have passed forty years in a country, in which his literary effort has been principally confined to the translation and composition of despatches, during which time he will have become naturally, even though but incidentally, acquainted with the habits, manners, customs, and literature of the people, yet I have always felt, even in the palmiest days of my translation work, that I was at best simply an empiric. To be a Chinese scholar involves a very much more extensive and deliberate study of the subject than any which I could ever lay claim to have given to it. Therefore, I say, I felt that I was not precisely the man to fill the chair of a Society like this, and I have all along, as I say, regarded myself merely as a *pis aller*. But my friend Sir M. Monier-Williams has been good enough to congratulate me upon my conduct in the chair, upon my diplomatic skill, upon my courtesy, and indeed upon a great many other things of that kind which I hardly care to repeat. In return, I can only say that no Chairman ever had an easier task than I had, for the discussions were never tinged, even in the smallest degree, with bitterness, and there never was approached anything of the kind which may be seen in more considerable assemblies than meetings of the Royal Asiatic Society—if there be any more considerable assemblies than ours (laughter). I must heartily congratulate myself, in fact, honestly as I consider myself unworthy of the position, to have filled it with what you are kind enough to call success, and I shall always look back upon the past three years with that mixed sort of satisfaction which many a general must

have felt who has indeed gained a victory, but a victory of which his historian has declared that in truth it was a very lucky one (cheers).

The proceedings then terminated.

II. LIST OF PRESENTS TO THE SOCIETY, APRIL-JUNE, 1890.

From the Secretary of State for India in Council.—Sacred Books of the East, vol. 33, Minor Law Books, by J. Jolly. Part I. 8vo. Oxford, 1889.

————— Selections from the Records of the Government of India, Home Department, No. 263.

————— Report on Administration of Bengal.

————— Records of Geological Survey, vol. 23, part I.

From the Government of Ceylon.—The Mahāvamsa. Part II. Translated by L. C. Wijesinha, to which is prefixed the Translation of the First Part by George Turnour. 8vo. Colombo, 1889.

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From P. Mukerji, Esq., M.R.A.S.—Syed Ashrafuddin

Ahmad (Moulavi), *Tabaqa-i-Muhsinya, or the Persian History of the Hooghly Emambarah.* 8vo. *Calcutta*, 1889.

III. CONTENTS OF FOREIGN ORIENTAL JOURNALS.

1. ZEITSCHRIFT DER DEUTSCHEN MORGENLÄNDISCHEN GESELLSCHAFT.

Vol. xxxiv. part i. (January, 1890; received 10 June, 1890).

1. Dr. Kuhnau. Metrical Statistics from the papers of Professor Stenzler.

2. R. Simon. The Śloka in Pāli.

3. F. Rückert. Love-songs from Jāmi.

4. E. Wilhelm. Priests and Heretics in Ancient Erān.

5. M. Wolff. On Sa'ajā al-Fajjāmi.

6. Ig. Goldziher. The Ship of the Desert. The Creed of Ibn Tūmart the Mahdī.

2. WIENER ZEITSCHRIFT FÜR DIE KUNDE DES MORGENLANDES.

Vol. iv. part ii. (received 13th June, 1890).

1. Jos. Zubaty. Change of Quantity in Vedic Terminations.

2. B. Meissner and K. T. Tallquist. Babylonian House Contracts.

3. Paul Horn. On the Abgar Legend.

4. H. H. Dhruva. The Villages in the Land Grant of Bhīmadēva II.

3. JOURNAL OF THE AMERICAN ORIENTAL SOCIETY.

Vol. xiv. (received 13th June, 1890).

Prof. Bloomfield. The Kausika Sūtra of the Atharva. Text.

IV. OBITUARY NOTICES.

The Marquis Tseng.—Tsêng Chi-tzū, the late Chinese Minister in London, died at Peking on April the 12th, of typhoid fever. He was the eldest son of Tseng Kwo-fan, one of the most distinguished Chinese statesmen of his day. The son was born about 1848. He succeeded his fellow provincial, the well-remembered Kwo Ta-jen, as Minister of China to the Courts of London and Paris in 1878, and in 1879, when the

question of the retrocession of Kuldja threatened to produce a rupture of friendly relations between Russia and China, he was also accredited to St. Petersburg. It was by him that the treaty of St. Petersburg, replacing that of Livadia, was negotiated; and in 1883 he was charged to attempt an arrangement with France on the subject of Tonkin. He had, in fact, been the formal and informal representative of China in Europe for five years, when he returned in 1886 to his own country.

The *Times* of the 20th June, 1890, reports a recent *Peking Gazette* containing an Imperial decree in his honour. This tells us that he was a man of tried capacity, and far-seeing mind, devoted to his duty and able in the conduct of affairs. "Commencing his career in the ranks of the Civil Service in the capital, he succeeded to the title of marquis of the first class, and was nominated by special decree of his Majesty, the late Emperor, expectant of office. After Our accession to the Throne, he was repeatedly singled out for advancement and promoted to high office. Selected for the post of Minister abroad, he cemented Our relations with friendly powers, and, by his intimate knowledge of affairs, disposed of all questions he had to deal with to Our perfect satisfaction. At a later period he was appointed member of the Tsung-li Yamen, and attached to the Board of Admiralty; in both of which posts he devoted himself to the conscientious discharge of his functions. Having recently been attacked by a slight indisposition, We granted him leave of absence from his duty for the benefit of his health, and it was Our hope that he would speedily become restored, and that We might long continue to have the benefit of his services. The sudden intelligence of his death has filled Us with profound sorrow. As a special act of favour We command that the brevet title of Junior Guardian of the Heir-Apparent be conferred upon him, with the posthumous distinctions usual in the case of the Vice-President of a Board. All the penalties he may have incurred in the course of his career are hereby remitted, and the proper department will examine the regulations and report to Us concerning the awards to which

he is posthumously entitled." The Emperor further orders that one of the Marquis's sons be brought before him in audience as soon as the prescribed period of mourning has expired, and that another son who is in the Board of War shall be promoted. "In this wise," concludes the decree, "may be made manifest Our desire to bear in earnest remembrance a loyal servant of the Throne."

The Marquis, although he had not taken the higher degrees, had had, as was to be expected in the case of the son of one of the foremost literates of China, a complete education, as the term is understood in his native country; that is to say, that he was thoroughly conversant with its philosophy, history, law, and *belles lettres*. In philosophy, like his father, he favoured the elder and simpler school of commentators; but, again, like his father, the study of his choice was history. Like all educated Chinese, he poetized, and, while in England, he contributed to our Journal a Chinese translation of some English verses. He also presented to the Society a copy of his father's works. He was made an honorary member in 1881.

Professor Minayeff.—We greatly regret to hear just as we are going to press of the decease of this well-known Russian scholar, who had devoted so much attention to the study of the Pali and Sanskrit sources of Buddhist history. He was engaged at the time of his death on an edition of the *Gaṇḍa Vyūha*, and had collated with that object the MS. of that work in the Hodgson Collection belonging to this Society. We hope to give a full account of the services he has rendered to the history of Buddhism in our next issue.

V. NOTICES OF BOOKS.

Iran und Turan. By Dr. HERMANN BRUNNHOFER.
(Leipzig, Friedrich.)

This is a study of the historical, geographical, and ethnographical problems that arise out of the statements on these heads to be found in the *Rigveda*. The author, who writes from the Grammar School at Goldingen in

Kurland, begins by showing how information which has reached us, by tradition, as to the most ancient geography of the table-lands of Central Asia, and as to certain beliefs and customs prevalent there, can be used to throw light on some doubtful passages of the Veda. (He incidentally discusses the Indian Flood legend, arriving at the result that the sea referred to is the Kaspian Sea.) Four episodes of Vedic legend are then compared with similar legends preserved in Persia in the *Shāh Nāma*, with the result that the legends arose, not in the Panjaub, but in Persia. Certain famous Vedic clan names are then shown to refer without doubt to the same high land (*Prithu-Parsavah* are Parthians and Persians, etc.), and it is suggested that the *Kāśyapā* are simply Kaspians, and that the Vedic names (of men) derived from the word "dog" are also due to Old-Persian influence. Other names are shown to be, though not Persian, yet belonging to the high lands rather than to the Indus Valley. (*Mudgala*=*Mogol*, etc.). Then follows a discussion of many geographical names in the Veda which point to a similar conclusion. And it is finally shown that several of the most famous poets and teachers of Vedic times were not Indians at all, but of Turanian or Iranian blood. The general result of the whole argument (which is enriched with frequent references to sources of information not much used hitherto by Vedic scholars, and which, though often bold, is always that of a widely-read and critical scholar) is that many of the Vedic poems are not the product of the Indus Valley, but were originally sung on the high land of Asia; and that the Vedic peoples were already, when the hymns were composed, so largely infused with Turanian blood that they can be called Aryan only in a sense much more modified than has hitherto been supposed.

The whole work is most suggestive and interesting. It is impossible to quote, or to discuss, in this short notice, any of the numerous instances which are advanced in support of the argument. But we hope to lay before our readers in a future issue one or two of the most striking of Dr. Brunnhoffer's new interpretations of Vedic passages. And our readers will

notice the interesting fact that Dr. Brunnhoffer has arrived from the point of view of a critical Sanskrit scholar at results very similar to those put forward in our own Journal by Mr. Hewitt—results reached at first from his long and intimate personal knowledge of the living representatives of the ancient Indians, and confirmed by subsequent study of such of the ancient documents as are accessible to English readers.

The view that the Aryans in the time when they first entered India were already a very mixed race, and that they brought with them songs and beliefs that had been sung and held on the high lands of Asia, will naturally encounter much opposition, but at least a *prima-facie* case in support of them is here made out.

The Mahā Wansa.

This second part of the Ceylon Government's edition of the Mahā Wansa contains the translation into English of the Pali Text as already published in Part I. It is the work of a thoroughly competent scholar, Mr. L. C. Wijesinha, interpreter Mudaliyar at Mātale. It contains a reprint of Turnour's translation of the first thirty-four chapters, of Professor Rhys Davids's translations (in this JOURNAL) of chapters 39 and 41, and of Mr. L. da Zoysa's translation of chapter 68 and part of 69. There are also added 'Chronological Tables' of the kings, extracts (bearing references to South India) from Caldwell's 'History of Tinnevely,' and an index of the principal names. The whole forms a handsome volume of 600 pages crown 8vo. printed at the Government Press in Colombo, and on sale at the record office there, at the low price of seven rupees and a half. It is unnecessary to point out that this book is of as great importance for the history of India, as it is for that of Ceylon, more especially in its earlier chapters for Northern India, and in its later chapters for the Dekkan. It should be in the hands of every Indian historian, and of every Indian archaeologist. And we trust that the cordial welcome with which its appearance will be hailed will encourage the Ceylon Government to go on in the good work

they have thus at last begun, and to give us both texts and translations of the dozen or so other Ceylon books which deal with the history or the faith of the Buddhists in India and Ceylon. We congratulate also the learned Mudaliyar on the successful conclusion of his arduous labour, the value of which will be more and more appreciated as years roll on.

Chants populaires des Afghans recueillis par JAMES DARMESTETER.

We have here, from the practised hand of the Secretary of the French Asiatic Society, what is simply a model presentment of an interesting and important historical problem. What is the Afghan language? Who are the Afghans? What are the moving ideas, and the inner spirit of the people, as shown in the songs popular in Afghan clans?

These are questions the correct answers to which must throw light on not a few historical problems, both old and new, of the widest bearing—questions, too, which have a vital importance of their own for those concerned in practical work with the Afghans of to-day. And these questions are here not merely nibbled at. The facts on which a correct solution must depend are first set out with great fullness and clearness, and then the conclusions to which they point are stated with the moderation and balance of judgment one would naturally expect from the author's previous works.

On the first point these conclusions are that the Afghan of to-day is the modern representative of a dialect closely allied to the ancient Zend. On the second point that the Afghans, though containing an element of Tartar blood, and a further admixture both of Arab and of Indian blood, are probably not only at base, but also in great part, Aryan. But the author points out that on this point the conclusions are both less certain, and also altogether less important, than those relating to the language.

There follows an exhaustive summary, in fifty pages, of the literary history of the Afghans, and a series of translations, extending over about 250 pages, of their most famous

and most popular songs, the original texts of which are afterwards given in full.

This masterly monograph is published for the French Asiatic Society at the expense of the French Government.

Outline Grammar of the Singpho Language, as spoken by Singpho, Doucanniya, and others residing in the Neighbourhood of Sadiya, Assam. By J. F. NEEDHAM, Assistant Political Officer, Sadiya. (Assam Secretariat Press, Shillong, 1889.)

This is a grammar, phrase-book, and vocabulary, of about 110 pages, prepared by an officer of Government, and printed in the official press of the administrative division. It is a very creditable performance, and an entirely fresh contribution to knowledge. Sadiya is on the River Brahmaputra, at the head of the Assam Valley, which is flanked on both sides by high mountains, and these mountains are occupied by barbarous tribes, speaking hitherto imperfectly known languages. They dwell entirely within British territory.

The Singpho are classed in Cus't's "Modern Languages of the East Indies" in the Tibeto-Burman family. They have the Patkoi range on their rear, but they are but the advance-guard of a much greater horde lying beyond the Patkoi range, within British Burma, known as the Kakyen or Kaki. They are to a certain extent civilized, but Pagan, *i.e.* neither Hindu, nor Mahometan, nor Buddhist. Singpho, or Chingpau, means merely "a man." Vocabularies, and Grammatical Notes, have previously existed, but this Outline Grammar relates to a particular portion of a large tribe localized near Sadiya, and has been compiled by the author, in whose civil charge they have been placed.

The author has already published a Grammar of the Miri language, spoken by another barbarous tribe, and he has a third of the Khampti language, belonging to a totally different family, the Tai, or Siamese, in preparation. This is very creditable to his industry and ability. It is much to be regretted that other officials with similar opportunities do

not work the virgin soil of their neighbourhood in the same spirited manner.

R. N. C.

VI. NOTES AND NEWS.

Harvard College.—Mr. Jacob Schiff, of New York, has given 50,000 dollars to the Board of Studies at Harvard College for the endowment of historical inquiry into the literature and beliefs of the Semitic races.

Mr. Syed Ali Bilgrāmi, one of the members of this Society, has been appointed Examiner in Sanskrit at the University of Madras. It is especially noteworthy that a Muhammadan gentleman should have been asked to serve in such a capacity.

Dr. Edmund Hardy, Professor at the University of Freiburg, has published (in Aschendorff's Series, Münster) a manual of Buddhism, entitled "*Der Buddhismus nach älteren Pali-Werken*," which differs from previous ones chiefly by the fullness with which the relations of Buddhism to Christianity are treated. The author bases his account on the older Pāli authorities, and the work is accompanied with a map, copious indices, and a useful bibliography. It is distinguished throughout by a sound historical criticism, and an acquaintance at first hand with the authoritative texts.

My attention was drawn last year by the Directors of the Royal Asiatic Society to the purchase of the Glaser collection of Arabic MSS. made last year by the British Museum. I forward an extract from the Parliamentary Report, giving a detailed account of the very rare specimens of the literature of the Zaidites.

R. N. C.

JUNE 28, 1890.

The number of MSS. acquired in 1889 was 400, viz. 392 by purchase and eight by donation, as follows:—

Arabic	361	Syriac	1
Pali	10	Armenian	1
Persian	9	Burmese	1
Hebrew	7	Lolo	1
Turkish	6		
Ethiopic	3		
Coptic	1	TOTAL	400

The most important acquisition of the year was the collection formed in San'ā and some unexplored parts of Yemen, by the Austrian traveller, Dr. Eduard Glaser. It consists of 328 Arabic MSS., with dates ranging from the eleventh to the present century, and represents a branch of Arabic literature hitherto quite unknown in Europe, and hardly known in the East beyond the limits of Southern Arabia, being the literature of the Zaidites, who form an independent branch of the Shī'ah sect. The Zaidites take their name from Imām Zaid, son of Imām Zain al-Ābidīn, and, consequently, great-grandson of Ali. It was in his lifetime (he died A.H. 122) that the schism of the Shī'ah took place, part of them declaring for Zaid, while the larger number proclaimed his brother, Muhammad Bākir.

Unlike the main body of the Shī'ah, who recognize only twelve Imāms, the Zaidites hold that there must be at all times a living Imām, chosen as the fittest and most worthy among the descendants of Ali. They had, in fact, an unbroken succession of such Imāms, who, settling in the highlands of Yemen, and combining temporal power with spiritual authority, maintained for centuries, with fitful success, some measure of political independence, and opposed a stout resistance to the Turkish invaders.

Their peculiar system of divinity and law has been set forth in standard works, written, for the most part, by the Imāms themselves, which, together with their numerous commentaries, form the main bulk of the Glaser collection. The principal of these works are, in chronological order, as follows:—

Al-Muntakhab by Imām al-Hādī Yahya B. al-Husain, who died A.H. 298; MS. of the thirteenth century.

Decision on points of doctrine and law, by the Imāms al-Murtada, who died A.H. 310, and Tarjamān al-Dīn al-Kāsim, who died A.H. 393; MS. of A.H. 479 (A.D. 1086).

Al-Taḥrīr by Imām al-Nāṭiq, who died A.H. 424; MS. of A.H. 558 (A.D. 1163).

Al-Intiṣār, a work of considerable extent, in which the doctrines and legal decisions of the Imāms are set forth

and defended against other sects, by Imām al-Muayyad-billah, who died A.H. 747; eight volumes, mostly of the fourteenth century.

Al-Tadkirat al-Fākhīrah, a manual of law, by the Fakīh Sharaf al-Dīn Hasan al-Nahwi, a contemporary of the preceding Imām; with numerous commentaries.

Al-Azhār, a text-book of Zaidi law, by Imām al-Mahdi, who died A.H. 840; with many commentaries.

Al-Bahr al-Zakhhār, a full exposition of the Zaidi system of theology and law, by the same Imām.

Ghūyat al-Afkār, an extensive commentary upon the preceding work by its author.

Of many works dealing with the history of the Imāms of the Zaidites, the following may be specially mentioned:—

Al-Risālat al-Nāṣibah, a poetical account of the Imāms, by Imām al-Mansūr ‘Abdallāh, who died A.H. 613; with an historical commentary.

A Kasidah addressed by the same Imām to the Khalīf of Baghdad, in commemoration of the Imāms, with a full commentary, entitled Maḥāsin al-Azhār, by Humaid al-Muhallī.

Yawāqīt al-Siyar, a general history of the Imāms, by Imām al-Manṣūr Aḥmad, who died A.H. 840.

Al-Hadā’ik al-Wardiyyah, a detailed history of the Imāms brought down to the same period, by Humaid al-Muhallī; in two volumes.

Al-Bassāmat al-Kabra, a poetical record of the Imāms brought down to A.H. 849, with a full historical commentary and continuation by Ibrāhīm Ibn al-Wazīr.

Bughyat al-Murid, an account of the Imāms of Yemen brought down to the eleventh century of the Hijrah, by ‘Āmir B. Muḥammad.

Simt al-La’āl fi Shi’r al-Al, a collection of the poetical compositions of the Imāms, with biographical notices, by Sayyid Ismā’il (a great-grandson of Imām al-Kāsim), who died A.H. 1079.

Sirat, or Life, of al-Mansūr-billah al-Kāsim, who died A.H. 393, by al-Ḥusain B. Ya’qūb.

Kāshifat al-Ghummah, a life of Imām al-Nāsir, who died A.H. 793, with an account of his predecessors, by al-Hādī Ibn al-Wazīr.

Al-Sulūk al-Dahabiyyah, a life of Imām Yahya Sharaf al-Dīn, who died A.H. 965, by his descendant Sayyid Muḥammad B. Ibrāhīm, who died A.H. 1085.

Poetical account of Imām al-Nāsir Muḥammad, who died A.H. 1130, with an historical commentary entitled *al-Raud al-Zāhir*, by Zaid Ibn Abi'l-Rijāl.



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OF
THE ROYAL ASIATIC SOCIETY.

ART. XIV.—*Notes on the Early History of Northern India.*
Part VI. On the Historical Value, Origin, and Growth
of Early Methods of Record anterior to Alphabets, in-
cluding Ideographic Signs, Sacred Numbers, and Myths.
By J. F. HEWITT, M.R.A.S.

As botanists and zoologists trace the successive stages of existence traversed by living plants and animals through species and genera to families, so the historian of human progress finds himself obliged to extend his generalizations through tribes and nations to races. Research proves that it is these larger units who, through the combined work of the several component parts of the race, are the authors of the underlying ideas which are acted out in its achievements. It also seems to show that there are two races who have most materially aided in the development of civilization—one, quiet, silent, hard-working and practical, whose members have always looked on the public benefit of the tribe or nation to which they belonged as their best incentive to action: the other, impulsive, sensitive, generous, and eloquent, who have looked on personal glory and the aggrandizement of their families and personal adherents as the object of their ambition.

But though these two races, represented by those called

Dravidians and Aryans, form the two poles or opposite points of the social sphere, there are between them an infinite number of gradations, some of which have been embodied in national unions which have been sufficiently powerful to exercise a wide-spread influence. If we attempt to gauge the work done by the several centres of influence which have formed successive landmarks in history, we shall find that all of it is not equally effective, enduring and far-reaching, and that for analytical purposes it is necessary to determine on a criterion by which to judge of the value of the work done by each of the most influential sections of the human family. Such a standard seems to be furnished by Professor Renan. This distinguished scholar, in his analysis of the characteristics which give a race the right to speak as an individuality among human species, has laid down the following as essential requisites:—(1) a language of its own; (2) a literature imprinted with a peculiar physiognomy; (3) a religion; (4) a history; and (5) a legislation.¹ This classification, if not exhaustive, at all events represents the principal sources of a lasting and far-reaching influence in the making of organized nationalities; but, as will be shown in the sequel, several of the terms require explanation so as to show how far they represent correctly the actual facts to be dealt with.

The most important of these requisites for the purpose of this essay is history, for without a history no literature, religion, or legislation could have arisen which would have had any influence outside the narrowest limits of human association, while religion and history are, when we deal with long past eras, merely different ways of looking at the same phenomena, religion being present history, while history so called is the account of the past phases through which the nation has passed, each of these being depicted in its religious belief. National history, as written by the great historians of Greece and Rome and their modern successors, is strongly imbued with the Aryan spirit, and hence it is essentially

¹ *Revue des Deux Mondes*, 1st Sept. 1873, p. 40. Quoted by Lenormant, *Chaldean Magic*, p. 378.

dramatic and personal. It shows how nations who were originally small communities, like the contending tribes of Greece and those who united to build Rome, rose to commanding influence over large sections of the human race, and tells of the fluctuations of their fortunes. But the key-note of these historical narratives is the constant tendency of the writers to show how events were moulded by groups of individuals formed into unions within the nation, and to call especial attention to the leaders of these groups. The historian dwells upon their personal struggles for pre-eminence and for the victory of the ideas which they regarded as essential to the increase of the national power. But before written history assumed this dramatic form, it consisted, like the accounts of the reigns of the kings of Judah and Israel in the Book of Kings, of merely short notices of the principal events in each successive reign, and these were appended to the recorded list of kings by the guardians of the records of each state in which archives were kept. These meagre records were preceded by an earlier period, in which merely the names of the kings were preserved, like the lists of the Egyptian rulers. These genealogical lists take us back to a time when families preserved lists of their ancestors, and this custom again points to the rule of a race which looked on the family as the unit. But this must, in the case of Southern nations at least, be a comparatively late period, for all historical evidence as to the early history of the nations of India, the Euphrates Valley, and Asia Minor tends to show that the civilization of these countries and of by far the larger part of Europe and Asia was the work of a race who looked on the nation as a union of tribes; who knew nothing of marriage and family life; and whose only known ancestors were the mothers of the tribe. These people were succeeded by the races who traced their descent to fathers of families, but these successors did not subvert, but only changed the old organization.

But the matriarchal race must have had a history and some historical method of records, and this could not possibly, like the histories of the patriarchal tribes, have been based on

lists of paternal ancestors. Nor could the epochs of their history have been the lives of their maternal ancestors, as under the tribal customs of the Dravidian races all children were taken from their mothers whenever they had reached an age when they could dispense with maternal care, and made over to the elders and matrons chosen as guardians of the young by the tribe or village. The rising generation when they entered on public life took their places as children of the tribe, and not as sons of their mothers. But these people founded cities, made long voyages from the Euphrates Valley to the shores of Asia Minor and Greece, and had reached a stage of civilization which could not have been attained by any race who did not possess some means of recording and storing the wisdom of their tribal ancestors for the use of their future descendants. But the historical portion of this record must have been divided into some epochs, like those furnished by successive kings, and these must have been originally given by the names of the various sections or tribes whose progress was to be recorded, and each tribe was thus treated as a collection of individuals united by a common name. Thus tribes like the Dorians and Hellenes became individualized as Dorus and Hellen.

But to make the history and practical knowledge of each tribe useful it was necessary that it should be handed down to each successive generation, and the means of doing this was secured among the Dravidians by a carefully organized system of education. The elders were required, as they still are in Dravidian villages in India, to teach the children entrusted to their charge the duties they would have to fulfil in after-life and to make them useful members of the tribe, and for this purpose they were obliged to impart to them the accumulated knowledge handed down by previous generations.

But to understand these people we must first learn what was the earliest form of historical teaching in an age when patriarchal ancestors were unknown, and when individuals as leaders of parties were people of much less account than their later successors, born in days when political agitation had become a science and a means of livelihood. And in entering

on this inquiry it is necessary to consider what evidence as to methods of record is given by the most ancient literary remains to which we have access. For this we must look to the countries in the Euphrates Valley. The earliest library of which we have recorded evidence is that founded by the great Kushite Semitic ruler Sargon I. in the city of Akkad. Sargon, who reigned about 3750 B.C., conquered Cyprus, and his son left there tablets recording his conquest, and he also ordered the compilation of the first edition of the great astronomical work *The Observations of Bel*, which was translated into Greek by Bērōssus,¹ and of which large portions have been found recorded on brick-tablets in the Assyrian libraries. The works placed in this library were written in a Semitic language, but the knowledge conveyed in them is founded on and translated from the earlier science of the Akkadians, who were, as Dr. Sayce shows, the first scientific astronomers of the ancient world.²

The writing of elaborate scientific works in an alphabetical character and the careful translation³ of the records of an earlier race implies a great progress in civilization which it must have taken ages to effect. This could only have been done after the invention of a system of ideographic signs denoting objects, the derivation of an alphabet and syllabary from them, and the discovery that permanent transferable records could be made on brick tablets or some other easily distributed and permanent materials, such as papyri or palm leaves, but it also requires the existence of a large literary class whose inventive powers had been stimulated by a national thirst for knowledge.

We can best realize the length of time required for the production of this advanced form of social progress among a people possessed of literary aptitude, great mental activity and powers of organization, by considering the evidence given by the still earlier records of Telloh. The Telloh

¹ Sayce, Hibbert Lectures for 1887, Lecture vi. p. 398.

² *Ib.* p. 400.

³ These records were not only translated, but transliterated from the Akkadian by the Assyrian scribes, who give the pronunciation of the syllabic signs they translate.

inscriptions recorded on temples and statues are, as I shall shortly prove, separated from the era marked by the founding of Sargon's library by many hundreds and certainly some thousands of years. They are written not in an alphabetical character, but in signs usually denoting certain objects, though some of them are syllabic. But these signs, which can be traced in changed forms through Akkadian literature, embody metaphysical and theological conceptions, indicating an advanced stage of culture. And these again, as will be shown in the sequel, represent records of past history which can only have accumulated during the lapse of many ages. Furthermore, the whole story to be deduced from the monuments of Telloh gives unmistakable evidence that the people who made them were a well-governed and strongly-organized race, who had founded an extensive foreign commerce, who undertook long sea voyages, and were able to attract to their dominions skilled foreign artificers who were not only practical mechanics, builders, and sculptors, but who were also able to place on record the plans they proposed to execute and to draw them to scale. These deductions are conclusively proved by the fact that the Telloh statues are made of green diorite, a stone which is not found anywhere in the region watered by the Euphrates and its tributaries, and which is said in an inscription on one of the statues to have come from the land of Magān, or the Sinaitic peninsula. This stone must have been brought by sea, and the workmen who wrought the statues must have been imported also, for it was only men trained in the country where these materials existed who could have learnt to work them. But these people must also have brought with them the practice of drawing plans to scale, or else they would not have placed on the lap of one of the statues a plan of the city of Telloh with the scale on which it is drawn marked on it. This scale, again, is not the later Assyrio-Babylonian of 21·6 inches to the cubit, but the scale of the Egyptian pyramid builders of the fourth and two following dynasties, of 20·63 inches. The attitude of these statues, again, is almost the same as that of the statue of Khephren, of the fourth dynasty, made, like them, of green


diorite; but the Telloh statues, though similar in style to that of the Egyptian sculptors, indicate a much earlier and ruder period of art than that exhibited in Khephren's statue.¹ They must thus date from before 4200 B.C., as Khephren was the third king of the fourth dynasty, which, according to Mariette's Chronology, began to reign 4235 B.C. The contrary supposition, that they are both of the same date or that the Telloh statues are later than that of Khephren, can only be supported by believing that the Telloh kings imported inferior workmen when superior sculptors were available. This is so exceedingly improbable that it may, I think, be safely assumed that the evidence tends to prove that the Telloh statues are very much earlier in date than that of Khephren, and that they are the work of artificers who came to Telloh when the Har-sheshu ruled Egypt, and before the accession of the dynasty of Menes in 5004 B.C. That this is perfectly possible is shown by the undoubted evidence of the artistic skill of the Har-sheshu given by their great monument of the Sphinx or the human-headed lion at Gizeh.

But though some of the Telloh monuments must be referred to a time probably very much earlier than 5004 B.C., the signs in which their inscriptions are written prove, as I shall now proceed to show, that the people who invented them had already passed through many ages of anxious and earnest inquiry into the mysteries of creation, and that during these ages four, if not five, races had made their religion the law of the land. They had, as each obtained the supreme power, made successive additions to the sacrificial ritual, so that it became a continuous record of national history, as it was framed and carefully kept in remembrance so as to secure the absolutely correct performance of the prescribed ceremonies, on which the prosperity of the country and its inhabitants was supposed to depend. This record further continued from race to race, as the new comers were no less careful to propitiate the old gods of the country than their

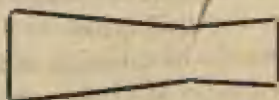
¹ Sayce, Hibbert Lectures for 1897, Lecture I. pp. 32, 33, Lecture iii. p. 137.

predecessors, and only added their own gods to the old pantheon.

The signs which I will take to prove these propositions are those denoting I. Woman, II. the Shrine or Altar, and III. a Star; and the proof I shall thence deduce would be still further corroborated if space allowed me to consider some of the other signs.

I. *The sign for woman.* This sign on the Telloh monuments, as given by Amiaud and Mechinseau, is .¹ This, as Professor Douglas informs me, is also the sign for woman in the old Chinese character. The meaning of the sign is distinctly explained in the Hindu Brāhmaṇas and Rigveda as compared with the Assyrian religio-astronomic representations on Babylonian Uranographic stones.² In the Hindu Brāhmaṇas the altar is said to be the woman³ and also the mother earth.⁴ In the instructions given for the construction of the altar for the new and full-moon sacrifice it is ordered to be made of earth in an oblong form contracted in the middle, measuring two cubits in breadth on the westward, and three in length, while the East is to measure less than the West so as rudely to represent a woman, thus :⁵—

W



Again, in the great annual Soma sacrifice the altar is ordered to be made differently, but still in an oblong form, thirty or thirty-three steps on the West, thirty-six in length, and twenty-four on the East side, representing in footsteps the

¹ Amiaud et Mechinseau's *Tableau Comparée des Ecritures Babyloniennes et Assyriennes*, No. 163, p. 65.

² The stone to which I especially refer in this essay is that called Stone B depicted in Professor Rawlinson's *Five Great Monarchies*, and copied in Eridanus River and Constellation by R. Brown, jun., F.S.A., Appendix ii. p. 77.

³ Eggeley's *Satapatha Brāhmaṇa*, i. 2. 5. 15, *Sacred Books of the East*, vol. xii. p. 63.

⁴ *Ib.* iii. 7. 2. 1, vol. xxvi. p. 175.

⁵ *Ib.* i. 2. 5. 14-17, vol. xii. pp. 62-64.

yearly measurements of time.¹ In a passage in the Rigveda i. 152. 2 the four-cornered oblong weapon is said to have conquered the three-cornered or the triangle. To identify these three and four-cornered weapons with the altar we must again turn to the Brāhmaṇas. The priest, in dressing the altar symbolizing the woman for the sacrifice of the new moon, is directed to lay first in the centre of the altar the wood of the sacred fire; round that he is to place the inclosing sticks (*paridhis*) in the form of a triangle, with its base to the West.² The mystic interpretation given for this is that the triangle representing the three former Agnis is to protect the new Agni the fire-god from the thunderbolt of the "vashat" call, with which Indra slew the Vritrā, the ancient snake-gods. This "vashat" call is the summons to the sacrifice. They were by this placed in a distinct position of inferiority to Indra, the god of the sanctifying waters, who was thus made the supreme god, as instead of the sacrifice being offered to them directly, as in the former ritual, it was offered to the new god, and they were only summoned by him to receive a share in what was once their sole property.³ These three former Agnis are said to be the Lord of the earth, the Lord of the world, and the Lord of beings, and in Parts III. and IV. of this series of papers I have tried to show by quotations from the Brāhmaṇas and Rigveda that this was the old sacred triad which held in Hindu mythology the same place and was composed of the same divine persons as in the Egyptian, Greek, Roman, Akkadian, and Assyrian religions. This triad had in Hindu mythology assumed the following successive forms before the introduction of the

¹ Ib. iii. 5. 1. 1-11, vol. xvi. pp. 111-113. Also see Part IV. of my Notes on the Early History of Northern India, J.R.A.S. April, 1890, p. 392, where I show that the thirty and thirty-three refer to the sacred ten lunar months of gestation and the eleven months sacred to the phallic gods, twenty-four to the solar year, and thirty-six to the three strides of Vishnu, the ruling god of the solar-lunar year.

² Eggeling's Sat. Brāh. i. 3. 3. 13, vol. xii. p. 87.

³ Eggeling's Sat. Brāh. i. 3. 3. 14, and i. 2. 4. 1, also i. 6. 3. 28, and i. 7. 3. 1-5, where Rudra the phallic god is first excluded from, and afterwards summoned to, the sacrifice in which he gets the sacred butter as his share, vol. xii. pp. 88, 92, 171, 199-201.

worship of the heavenly as distinguished from the earthly fire:—

I. (1) The father, (2) the life-giving bisexual power, (3) the mother earth.

II. (1) The father, (2) the earthly fire of the fire-stick, (3) the mother-earth.¹

It was this last phase of triad worship, which is represented in the instructions I have now quoted, and in these the middle enclosing stick, laid on the Western side of the triangle, is the most important. It is ordered to be laid down first, and the directions are that the priest is to take a Samidh, or the kindling stick of the pair of fire-sticks, and to light with it the middle inclosing stick, and then to lay it on the fire.² Now to light with the kindling stick he was obliged to insert this stick into a hollow formed in the stick, placed at the base of the triangle, and to rub it till it ignited. When it was lighted, he was to lay the stick so that it touched both the apex and the Western base. When this is done, the whole plan of the oblong altar with the triangle laid on it is as follows: Now this triangular superstructure is precisely



like the sign for woman given in the Telloh inscriptions, with the exception that in the Hindu figure the fire-stick is made to touch the Western inclosing stick or the earthly vital power, which, as the life-giving heat, animates both the father and the mother. The Telloh sign, in which the line inside the triangle is made only to touch the apex, seems more distinctly phallic than the other, and represented the generator God as an anthropomorphic deity. When once it is admitted that the gods are generators, the change in the symbol in the Hindu triangle must indicate the ascription of the work of generation to the sacred power of the divine heat shown in its generation of fire by its own internal vital force from the Western stick of the triangle, which was the symbol of the

¹ Part IV. of Notes on Early History of Northern India, J.R.A.S. April, 1890, p. 365, also see pp. 238-250. I have seen reason to alter here the middle god of the second phase of the triad.

² Eggeling's Śat. Brāh. i. 3. 4. 1-6, vol. xii. pp. 90, 91.

receptive life-giving power, and it was the union of the two which made both father and mother capable of producing fresh life.

But in the representations of the altar on the Babylonian Uranographic stone we find that of the five altars dedicated first to the gods of the five seasons, and afterwards to the five planets, the altar to Mercury, the Babylonian Nebo, is in a triangular form, and is depicted thus:¹ It is placed in the darkest place on the dark side of the heavenly circle, and is guarded by the great serpent whose head overshadows the apex of the triangle forming the top of the altar. The Babylonian Nebo, or Nabu the prophet, is the Akkadian Nusku called "the sublime messenger of Mul-ge, or lord of the lower world."² That is to say, he was the Latin Mercury and the Greek Hermes, the god of the earth by fire and the messenger of the gods. Therefore the triangular altar of Nabu, or Nusku, on the Uranographic stone, and its counterpart, the triangle placed on the altar of the earth, the mother of all things in the Hindu ritual, tells of a long series of evolutions of religious belief.



First there was the worship of the mother-earth, the virgin author of all life, who produced all things by her inherent energy, and who looked on the blood of the human victims sacrificed to her³ as the food she required to sustain her life-producing power.

Secondly, the worship of the anthropomorphic father introduced by the worshippers of the phallus and the snake, whose god was the great Nahusha of the Hindus, and the sacred Naga, the great king of Xerxes' inscription, and the Naga, or snake, which was depicted on the banner of the


¹ Eridanus River and Constellation, by R. Brown, jun., F.S.A., Appendix ii. p. 77.

² Lenormant, Chaldean Magic, p. 17.

³ Human sacrifices to the mother-earth were universal. I have dealt fully with the subject in Part IV. of this series, J.R.A.S. April, 1890, pp. 374-379. Lenormant, Chaldean Magic, p. 231, shows also, from the sacrifice of seven children to the gods of darkness made by Amestus, wife of Xerxes, on the advice of the Magi, that human sacrifices were offered by the mother-worshippers of Iran, who preceded the Zoroastrians.

Parthian kings.¹ It was this snake which watched and guarded the triangular altar.

Thirdly, that of the triad including as the third person, besides the father and mother, first the bisexual god, and afterwards the god who produced fire on earth, as embodied in the pair of fire-sticks.


II. *The symbol for altar or the shrine.* This in the Telloh signs is thus depicted ². Here we have no longer the altar of earth with the triangle on it, but the stone altar made square, as sacred to the four Agnis, including the heavenly fire which bore the savour of the sacrifice up to heaven. This was the four-cornered weapon which, according to Rg. i. 152. 2, conquered the three-cornered triangle. The fire of the four Agnis is shown as burning on the top of the altar, but we have also on it a further sign, the saltier X, which Professor Douglas informs me is the old Chinese symbol for five (5), and it is this meaning which it appears to bear in the Telloh sign. The reasons for this seem to be as follows: The original worship with which sacrificial ritual began was that of the divine mother. It was she who became the first god of a united nation, who recognized that, whatever their tribal descent might be, and whatever allegiance they owed to totemistic ancestors and guardians to whom the disunited tribes had hitherto appealed for help, they were, since they became a nation, all the children of the great earth-goddess. It was she who was the author of all animal and vegetable life, and the ultimate mother of all human beings born within the land over which she ruled. This was the country of the Mountain of the East, called in Akkadian *ḫarsak-kurra*, which lay to the North-East of the Akkadian land, and "beyond which extended the land of Aralli, which was rich in gold, and inhabited by the gods and blessed spirits."³ It was these people who are called in Hindu mythology the *Rakshasas*, or worshippers of *Rak*, the Ak-



¹ Brunnhofer, *Iran and Turān*, iii. 1. pp. 49, 50.

² *The Three Hieroglyphic Systems*, by Major C. R. Conder, *Archæological Review*, vol. iii. 2, April, 1889, p. 104, pl. 1.

³ Lenormant, *Chaldean Magic*, p. 152.

kadian for woman, and who, like those living round the Akkadian sacred mountain, are said in the Brāhmaṇas to come from the East, which was to them the country to the East of the Panjāb.¹ They are the people who in the Zendavesta are described as living in the sacred land of Seistān, the Sogdiana or Sakastanē of the Greeks. This was the country where the Haētumant, the modern Helمند, pours its waters into the lake Kasava, now called the Zarah or Hamūn sea, and where Frangrasyan, the king of the Turanian snake-worshippers and builders of stone altars, brought a thousand springs into the lake whence he irrigated the country.² It was here that Mount Ushidarena (the mountain that gives understanding³), the most sacred seat of the Zamyād, or spirit of the earth, is situated. It was this sacred mother-earth who thus inclosed in her womb the four Agnis represented by the saltier, which thus came to denote the number five.

But this sign of the altar, or shrine, showing the four Agnis, or fire-gods, is not confined to the Akkadians, for among the Hittite signs⁴ we find that for altar thus depicted . Here we see the sacrificial fire burning in the right-hand corner of the altar, while below the four supreme gods are represented as sanctifying the altar and the sacrifice, and dwelling within the sacred shrine. The Hittites, again, were a Northern people, who ruled Asia Minor, and who were probably ruled by the Northern tribes who brought the worship of the fire-god to supersede and be incorporated with the generators, or anthropomorphic gods of the South.

III. *The Sign of the Star.* This in Telloh inscriptions is represented in two ways— and , the eight-rayed star.⁵

¹ Eggeling's Sat. Brāh. i. 3, 4, 8, p. 92.

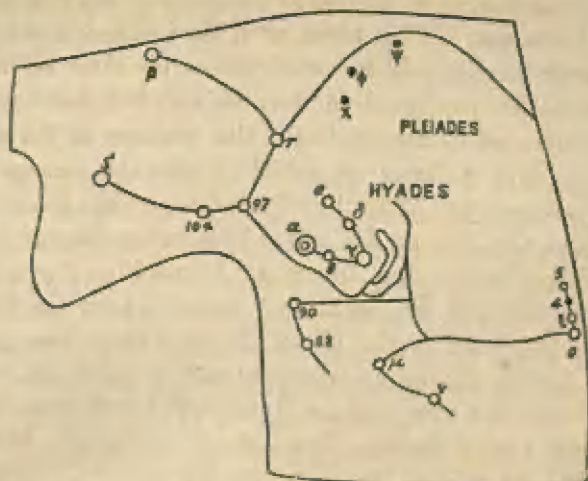
² Darmesteter's Zendavesta, Zamyād Yast, x. 66, and West's Bundahis, xxi. 25, Sacred Books of the East, vol. xxi. p. 302, and vol. v. p. 136.

³ Darmesteter's Zendavesta, Zamyād Yast, i. 2, Sacred Books of the East, vol. xxi. p. 287, note 5. Bruunhofer, Irān und Turān, iii. 3, p. 83, interprets it as the Mountain of the East, and connects it with Ushas, the dawn, and with the Hindu Ushinara, the father of Shiva, the phallic god.


⁴ Archaeological Review, vol. li. No. 2, April, 1889. The Three Hieroglyphic Systems, by Major C. R. Conder, p. 110, No. 40.

⁵ Both these signs appear in Amisud and Mechinseau, Tableau Comparée des Ecritures Babyloniennes. The bull sign being No. 229, p. 95.

In the first sign the A is the sign for lord, while the figure below it represents the ancient triad triangle surmounted by two upright bars. These must be, as I shall show presently, two of the gods of the old pentad, formed when the triad dominated by heavenly and spiritual influences was made the ruling creating and producing power both in heaven and earth. The figure rudely represents a bull's head, and is also used in the Telloh inscriptions without the covering sign A to represent a tame bull.¹ At Telloh there is an inscription dedicated to Ana, the sky, which is said in the inscriptions on it to have been built by Gud-ea. This name means the bull (Gud) Ia or Ea, and Ea, again, means the house (E or I) of water (A). The explanation as to how a sign denoting the God of the House of Waters came to be applied to the bull-god is supplied by the following drawing of the constellation Taurus as described by Ptolemy:²



In this drawing the bull is shown as inclosing the watery

¹ Amiaud et Mechinseau, *Comparée des Ecritures Babylonniennes*, No. 47, p. 18. The wild bull is represented by the sign . The three eyes here depicted are again reproduced in the epithet of "the three-eyed god," applied to Siva in the *Mahābhārata*, *Salya Parva*, xlviii. 36, p. 193, No. 48, p. 19.

² This drawing is taken, by the kind permission of the author, from the *Tablet of the Thirty Stars*, by J. Brown, jun., F.S.A., *Proceedings of the Biblical Archaeological Society*, Feb. 1890, p. 23.

constellations Hyades and Pleiades, that is, as forming their house.

This, like the most ancient part of the information given in Ptolemy's astronomy, was doubtless supplied from Chaldean sources used by the early Greek astronomers, and it represents Taurus as the bull of heaven, whilst the representation of the bull with the addition of the symbol for lord, denoting star, in the Telloh inscriptions, makes the bull the lord of the stars, and the name Gud-Ia or the bull Ia shows that it was Ea or Ia who was made the ruler of the heavenly host.

It was thus he became the bull of heaven, the leader of the herd, and his position is exactly the same as that of the Hindu Pushya, or Pūsh-an, the god (an) Push, of the Hindus, who was Pasu-pati, the lord of cattle,¹ and it was Push who, after the dethronement of Tai, the mother, led the herd of months out to pasture as the ruler of the first month of the lunar year. This began with the first new moon after the winter solstice, which month was called after his name. This was the year used in Assyria and Babylonia in the time spoken of by Sargon in the Observations of Bel as the "remote days of the moon-god."² Under this arrangement the year began just after the winter rains of the Euphratean delta and the Persian Gulf, which were represented in the solar Zodiac by the sign Aquarius. It was thus the God signified by the sign Zib, meaning "water,"³ later the Fishes, the god Ia, Lord of the House of the Waters, who poured down the fertilizing rains which were to give life to the growths of the new year; and it was this new year, again, who was the Akkadian Dumu-zi, the Assyrian Tamnuz, the only son of Ia, the year who was called "Dumu-zi," Son of the Flood,⁴ when the story of the flood was a nature myth symbolizing the death of the old year, which was killed by the winter rains and the birth of the new year.

¹ Eggeling's *Sat. Brāh.* i. 7. 3. 8, *Sacred Books of the East*, vol. xii. p. 201.

² Sayce, *Hibbert Lectures for 1887*, Lecture iii. p. 166.

³ This interpretation has been kindly given to me by Mr. R. Brown, jun., F.S.A.

⁴ W.A.I. 2. 47. 29, Sayce, *Hibbert Lectures for 1887*, Lecture iv. p. 233.

Ia, or the heavenly bull, retained on his transfer to the solar year the lunar sign γ , representing the full and crescent moon which belonged to him as the ruler of the moon's year; but in this transfer he became his son Marduk (the Akkadian Amar-utuki, the light of the sun), the young calf, who was the ruler of the vernal equinox, instead of the winter solstice.¹

Thus the various representations of Ia as a heavenly god give us an account of the evolution of religious astronomy. When he was first raised to heaven as the fish and the water, and before he was the bull, he became the lord of the stars, and took the chief place in an astronomical system founded on observations of the stars, and the division of the heavenly sphere into a series of segments marked by selected stars. These were the fixed stars, which are represented in the *Zendavesta* as the maintainers of law and order in opposition to the wandering stars, the *Pairika*, the moon and the planets who disturb the heavenly order. Under this system the stars became the hands of the heavenly clock, and their changes denoted the lapse of time. When continuous observations had enabled the early astronomers to trace the path of the moon and to trace her course as a measure of continuous time, the heavenly bull marked the first month of the lunar year, and was afterwards transferred to the solar system.

This chronological sequence is exactly maintained in the Hindu sacred writings. In the great cosmological hymn of the *Rigveda*, i. 164, 8, the heavenly bull, the house of the holy water of life, is represented as the divine mist rising from the water. This mist, when impregnated with the thought of the spirit of life, begot in the womb of the mother-earth the new year calf (v. 9). This, again, is the reproduction in India of an Akkadian doctrine. As Lenormant says: "The Akkadians (and they transmitted this idea to the Chaldeo-Babylonians of more recent ages) considered the humid element as the vehicle of all life and the source of all genera-

¹ *Kosmologie der Babylonier*, by P. Jensen, pp. 84, 88.

tion." "Hea was its soul and spirit, and therefore closely connected with it."¹

Ia in this form was Thraetaona, or Trita Aptya, the third (trita) and ruling water-god (Aptya) of the Zendavesta, Rigveda, and Hindu Brāhmaṇas. It was he who slew the great snake Azi Dahāka, who ruled in the land of Bauri, or Babylon,² and who in his other form of Indra, the heavenly sap (Indu), slew the Vritra, or serpent races, in the Rigveda.

But this supreme divinity displaced the older Ia, who was the chief of the earliest divine pentad. This consisted of the anthropomorphic triad and the mother-earth, and the snake-father, ruling the father-land of the nation. This last was the great snake Nahusha of the Rigveda and Mahābhārata, who in the Brāhmaṇas became the phallic god Rudra, and who was Ia in his earlier form of a serpent.³ But this conception of the five great gods was founded on the five seasons of the year of the people of the Persian Gulf, winter, spring, summer, rainy season, and autumn, and this was earlier than that exhibited in the bull-star of Telloh. In this last the bull of the house of waters (Gud-ea) ploughed the course of the year in the stars as ruling them and the year. But the conception of the heavenly bull as the plougher is one which must be bound up with a definite agricultural year, and the bull of the house of waters could not take his place as the leader of the starry heavens and of the year till he became the moon-bull, that is, till the moon was looked on as the measurer of the year. But Akkadian evidence shows that Ia took his place in the stars before he became a bull, and when he was called by his more common title of Ia ḫan, or Ia the fish. That the fish was the first sign is clear when we consider the symbol under which the fish-god is represented among the signs of the zodiac. He is there depicted as the goat-fish, the goat with the fish's tail, and is Capricornus in

¹ Lenormant, *Chaldean Magic*, p. 156.

² Darmesteter's *Zendavesta*, *Aban Yašt*, viii. and ix. 29-35; Eggeling's *Sat. Brāh.* i. 2. 3. 1 and 2, *Sacred Books of the East*, vol. xxiii. pp. 61, 62, vol. xli. pp. 47, 48.

³ Sayce, *Hibbert Lectures for 1887*, Lecture iii. p. 184, Part II. of my *Notes on the Early History of Northern India*, J.R.A.S. pp. 263-268.

our Zodiac, and Makara, the sea-monster, in that of the Hindus. In the Akkadian signs he is Shuhu, the ibex, or mountain-goat, and the gazelle of the Euphratean plains. Shuhu, the ibex, or gazelle, was the animal sacred to Mul-lil, lord of the dust (lil).¹ It was the animal who dwelt on the sacred mountain of the East, *ḫar sak kurra*, sacred to the great mother;² and who descended to the river plains as the gazelle, and was looked on as the symbol of fecundity. The ibex, which must have been the sign of Ia when he was the Zi-ku, or spirit (Zi) of the earth (ku), was succeeded by the goat and snake, both sacred to the father-god, and typifying the generative power. To the goat a fish's tail was attached when the father snake became the encircling ocean, when in the Hindu story of the flood the horned fish saved Manu (the thinker) the new year of a holier time and the father of a holier race,³ when its mists and waters were thought to be the home of all life, and when the gods were raised from earth to heaven. That this transformation must have been made before the bull became ruler of the stars and the leader of the lunar year, is clear, for if the bull had held that post before the goat, Ia the fish would have been joined with the bull, and not with the goat. The subsequent substitution of Ia the bull for Ia the goat-fish makes a new departure in religious and scientific evolution, and seems to denote the acceptance of the complete lunar year of thirteen months, beginning with the month of the bull, the Pūsh of the Hindus, and the Poseideōn of the Greeks, instead of the month sacred to the mother. This new evolution was marked by assigning to the heavenly bull the lunar sign, by which he was henceforth known among the signs of the Zodiac.

The older name of Ia, the fish, is preserved in the story told by Bērōssus of Oannes and by Hyginus of Euahanes, both of which names are derived from the Akkadian name Ea-ḫan. He is described as the fish-god who rose from the waters

¹ Sayce, Hibbert Lectures for 1887, Lecture iv. p. 284.

² Lenormant, *Chaldean Magic*, p. 152.

³ Part IV. of this series of essays, J.R.A.S. April, 1890, p. 344; *Mahabhārata Vana* (Markandeya Samāsya) Parva, cxxxvii. pp. 562-566.

and revealed "religion and social laws to men."¹ In this story he is described as rising from the ocean, which was the rope, or great serpent, the Midgard of the Northern Edda, which surrounded the earth. This points to a time long before the gods were looked on as the rulers of heaven, and which must be very near to those when the ruler of all things was the serpent Nahusha. Ia in this form is preserved in the Hindu Yayāti, the reduplicated Ia or Ya who succeeded Nahusha in Hindu mythology. He was not a heavenly deity, but the father of the five serpent or royal races of India. Their mothers were the heavenly Deva-yānī, the goddess (deva) of the Yas, or worshippers of Ia, the god of the waters encircling the earth, and Sharmishta (she who is ashamed), the daughter of the King of the Asuras, or serpent-worshipping races. Devayānī was the mother of Yadu, the father of the Yādevas, or worshippers of the god Ia, whose home was at the holy city of Dwaraka, the door (dwar) of the earth (ka) situated on the sea near the mouth of the Indus, and whose god Vishnu was distinguished by the number nine, the number which among the Akkadians was that sacred to the igogi, or spirits of heaven, of whom Ia was the eldest born;² and of Turvaṣu, or the father of those to whom Tur, the Akkadian pole star, was the chief god,³ who were also called Ya-vanas,⁴ and were the Northern Turanians. The union of the two tells of the union between the Northern and Southern races, between the Southern people who worshipped the great snake, the encircling ocean, and the Northern tribes who looked to the starry heavens as the home of the everlasting god. It was among these last people that Ia assumed the form of Io, the Greek goddess of the violet-dark (ἰος) night,⁵ the Varuṇa, or dark night of the Rigveda, and it is in

¹ Lenormant, *Chaldean Magic*, pp. 157 and 203.

² Sayce, *Hibbert Lectures for 1887*, Lecture iii. p. 141, also p. 752 of this Essay.

³ The Akkadian pole star was Tur. See *Tablet of the Thirty Stars*, by R. Brown, jun., F.S.A., *Proceedings of the Society of Biblical Archaeology*, Feb. 1890, Part ii., p. 27.

⁴ Part II. of this series of essays, *J. R. A. S.* April, 1889, pp. 213, 246-249.

⁵ She was the mother of the Ionians ("Iones"), and the Hebrew Yavan, who were thus the sons of Ia, as the divine mother.

this form, contradistinguished from the more Southern form of the watery mists, that Ia represented the celestial ocean. It was in his or her semi-material form that she represented the Zi-ku, or spirit of the earth rising from the material ocean.¹ We thus see in Ia the god who, as Lenormant shows, descended, unchanged in name but with different functions, from the Akkadians to the Semitic Assyrians,² and who also became the supreme god of the Greeks and Hindus. He was first the great snake, then the encircling ocean, afterwards the dark night, and then became the ruler of the stars, first as the goat-fish, and who afterwards, as the bull of heaven, ruled the lunar year. He was the great father, the creator of the year and all that it produces, and was finally the righteous god, the heavenly father and mother. It was on his name, that of Yah, translated in our version as the "name of the Lord," that men began to call in the days of Enosh,³ the son of Set, or Seth, the serpent-god of the Egyptians and Jews, and it was he who, in the flood story, as told in Genesis, is the Yah who destroyed the wicked race of serpent-worshippers, and brought in the new year, or era, of a new and holy life.

But when we turn from the Telloh sign of the bull-star to other signs for stars, we find the five gods of the Pentad appearing again in the Egyptian star ✕. Here the upper three signs distinctly represent the heavenly triad, while the lower two represent the earthly duad. The whole denotes growth beginning from the roots and extending to trunk and branches, and also symbolizes the five seasons. But the course of religious evolution from the old Pentad is most distinctly shown in the six-rayed Hittite and Cypriote signs for star. These are ⚡ Hittite, and Cypriote ✧, and for the interpretation of them we must turn to the story of the fire-god told in the Aitareya Brāhmaṇa. Nabhāuēdishtha, who is in this story the god of the sacrificial fire, means he who is nearest to the navel, and the reason of why this name was

¹ Lenormant, *Chaldean Magic*, p. 153.

² *Ib.* p. 159.

³ *Gen.* iv. 26.

given to the sacred fire will be at once seen by referring to the sketch of the altar, meaning the woman with the sacred triangle on it, in p. 706, where the original fire-stick is shown in the apex of the triangle. It is this which is especially referred to in Rg. iii. 29. 4, a sacrificial hymn to Agni, where it is said, "We place thee, O Jatavedas (Agni), in the place of Īḍa, in the centre (Nābhi) of the earth (i.e. in the centre, or navel, of the altar), to carry up our offerings."

Nabhāpēdishtha is said to have learnt from his father, Mana (the thinker), how to raise his five brothers (the anthropomorphic pentad) up to heaven, and the story tells further how he supplanted Rudra, the phallic god.¹ From this it appears that the sixth ray of the symbol for star denoted the Northern fire-god added to the five gods of the Southern races. We thus find two series of six supreme gods, one in which the leadership of the Pentad is assigned to the lord-bull, and the other in which it is taken by the five gods of the Northern tribes.

The eight-rayed star ✱, which also appears together with the bull-star on the Telloh monuments, also seems to show the influence of the fire-god, and to be a sign of the perfect divinity formed by the union of the four fire-gods.² As the sign appears on monuments much earlier than the time when the solar year was introduced, about 4700 B.C., it is impossible it could be solar.

Historical Deductions from these Sacred Signs.

But these sacred signs also tell us of the existence of at least three, and, as will be shown later on, of four early races, who had, by their religion and power of cohesion as units formed by allied tribes, coalesced into powerful nations, and

¹ Ait. Brah. v. 2. 14, Haug's translation, vol. ii. pp. 341, 342, also Part V. of my Notes on the Early History of Northern India, J.R.A.S. July, 1890, pp. 550-553.

² Dr. Sayce, Hibbert Lectures for 1887, Lecture ii. p. 141, shows that eight was the number sacred to the Anunaki, or gods of earth. Nine denoted the "igigi," or gods of heaven. Hence the first fire-god, the earthly fire which preceded that of heaven, was a god of earth.

who in their respective spheres of influence founded the social systems of Europe and Asia. These are the—

1. Rotou. 2. Amou. 3. Tumaha of the Egyptians.

1. Shem. 2. Ham. 3. Japhet of the Jews.

1. Airya. 2. Toura. 3. Sairema of the Persian Shah Námah.¹

The Mother and Father-Worshippers.

Taking the last of these races first, they would seem to be the Mongoloid tribes of Malayan affinities, who came to India from the East, and instituted the first rude forms of village communities and of unions of villages into provinces. They were an agricultural and forest race, and worshipped the mother earth and the local spirits living in the trees of the forest. They advanced slowly Westward until they met with the second race, the Southern Australioids, or Turanian Dravidians, the sons of the Akkadian Dan, the judge, called Dānava and Asura in the Hindu mythology, Dānus in the Zendavesta, and Danaï by the Greeks. They were the shepherds living in the Himalayan valleys and the mountains of the East, who fed their flocks and herds along the river plains where they were open and free from forest. They made the mountain-goat, or ibex, their sacred animal, which was sacrificed instead of, and also together with, the human victims offered to the mother-earth. They were the snake-worshippers and followers of the God called in the Zendavesta Frangrasyan and Azi-Dahāka. He was their god Viru, or the male form of creative energy. They are called in the Gāthas of the Zendavesta the Turanian Fryano, "who further on the sentiments of piety with zeal."² These people seem to have

¹ The Traditions of the Archaïan White Races, by J. S. Stuart Glennie, Trans. Royal Historical Society for 1889, pp. 310, 311.

² Mill's Yasnas, Gāthas Ustavaiti Yasna xlv. 12, Sacred Books of the East, vol. xxxi. p. 141; also Part V. of my Notes on the Early History of Northern India, July, 1890, p. 631. I here argued that Viru was the Hinduized form of the Zend "fry"; but since writing this, I have read Dr. Hermann Brunnhofer's Iran and Turán. He in chap. ii. p. 28 says that, at least in the Sanskrit, a Zend *f* becomes *p*. Thus the Zend *framōtān*, a governor, becomes in Sanskrit *pramōtār*. Thus "fry" could not become Viru, but *puru*. I have already shown

united with the mother-worshippers to form a nation of agriculturists and shepherds in the land of Seistān, which was ruled by the Turanian Frangrasyan, who irrigated the country by the thousand springs which he brought into the lake Kasava, the modern Zarah or Hāman Sea. It was these people who were the ancestors of the agricultural tribes of India who all worship the Viru.

It was these Turanians, who were the stone-builders, who first substituted the stone altar for the earth altar of the mother-worshippers, and the memorial stone pillar for the phallic wooden sacrificial stake. It was this race who were the builders of the Neolithic period, and who raised most of the early stone monuments throughout Europe and Asia.

This alliance between the Turanians and mother-worshippers is recorded in the Zendavesta and Shah Nāmah. The Zendavesta tells of the two wives of Axi-Dahāka, the great snake, who were after his death married by Thraetōna. They are called Savanghavāch, or she whose speech (vāch) is of the East (savah),¹ and Erinavāch, or she whose speech (vāch) is that of Irina, the land of the bull (Akkadian Ira), or of the still more universally sacred mother the Ida, Ija, or Ira of the Hindu and Greek mythologies. According to the Shah-nāmah, Savanghavāch became the mother of Tura, king of Turan, that is to say, of the Turanian, or Hamitic races, and of Sairima, king of Rām, that is, of the tribes worshipping the dark night as their mother, the Io of the Greeks, the Rām of the Zendavesta, and the Rāma of the Hindus.² They were the Ionian, or Japhetic races, the Yavana of the Jews, who sailed from the Persian Gulf,

numerous instances in which Dravidian roots have been adopted in Sanskrit, and these Dravidian people would at least call themselves by a Dravidian name. This would make the root written as "paru" in Sanskrit the same as the Tamil *peru* which means "to beget" (Caldwell, *Comparative Grammar of the Dravidian Languages*, p. 486), and the name would thus mean the "worshippers of the god who is the generator, or father."

¹ Sarah in the Bundahis is called the Eastern Region, West's *Bundahis*, xi. 3, *Sacred Books of the East*, vol. v. p. 33.

² The Yādavas, or tribes worshipping Ia, and living at Dwaraka, were also descended from Rāma, the son of Rohini, the red cow, called Balārāma, or the Strong Rāma. There certainly seems to be a connection between Rām and Rūm, and the name Rām appears to denote the mother-god of the sea-faring people.

colonized the coasts of the Mediterranean both in Europe and Asia, and made their way by sea to India as the Magas, or mother-worshippers. These last are the people who are described in Assyrian documents as living on the coast and speaking "the language of the fishermen,"¹ which differed from the Turanian tongue of the Akkadians and the Semitic speech of the Assyrians. Erinavāch, on the other hand, became the mother of Airya, the son of Ira, the bull or cow, and Iḍa, the offspring of Manu, who, in the Hindu story of the flood, was the mother-earth, purified and sanctified by the heavenly waters, which, descending from the home (I or E) of the god of the water (A), destroyed the old earth, the home of the sinful race.

The Ural-Altaic Race and Kushite-Semite Races.

The third race were the people of the sacred Irān, and were the Ural-Altaic tribes, who came from the North as the men of the Bronze age, and who, after deifying in their Northern home the fire-god, who taught them to use metals, and learning the arts of building in stone and measuring their work both in stone and wood, from their predecessors, the stone-builders of the Neolithic period, applied this system of measurements to the stars in heaven. These stars were the heavenly fathers and mothers of the earlier race. They, when they reached the South and became united with the Akkadian astronomers, learnt to look on the ship Argo, the Satavāesa of the Zendavesta, as the ship of the mother, and on the star Canopus, the Hindu Agastya, as the heavenly father, and made Tistrya, the dog-star, or star of the Tsir, or snake, the national star of the fire-god, before the days when the goat-fish Ia became the ruler of the stars. The race of northern artificers formed by the union of the Ural-Altaic people of the North with the Southern and Midland races became the fourth race, the sons of Kuṣ, or Kaṣyapa, the sacred tortoise,² who is

¹ Lenormant, *Chaldean Magic*, p. 247.

² Weber, *Ind. Stud.* i. 167, quotes Śat. Brāh. vii. 5. 1. 2, as giving Kaṣyapa as the name of the sacred tortoise.

the totem of the Hindu Kurmis, or agricultural tribes. It was this people who traced the annual motions of the moon in the segments of the heavenly sphere, and thus gauged the course of the moon in the lunar year and traced the paths of the planets. They made the moon, called Kaşin, or the daughter of Kus, in the Mahābhārata,¹ the ruler of the year. It was they who in their earlier phase as the Hittites, the Northern conquerors, the Hitaspa of the Zendavesta,² first by the fire-god slew the judge Urvakshaya (the ancient (Ur) speaker (vaksh), the father of the snake-worshippers), and who from Ātarōpātakan, the land of fire (Ātarō),³ lying to the South-East of the Kaspian Sea, first disturbed the ancient races who worshipped the mother earth of the mountain of the East, the heavenly mother, the dark sky, and the five gods of the holy pentad ruling the five seasons of the year. It was by their union with these old races that they became the sons of Kus, or of the Kaspian Sea, and adopted as their sign and sacred animal the horse (aspa). But this horse was not the horse of the Hittites, but Keresaspa, or the horned horse of the Zendavesta.⁴ It was they who found out, by tracing the course of the moon and planets, that they were not, as they were regarded by the mother and snake-worship-

¹ Mahābhārata, Śalya (Śalya-buddha) Parva, xxxv. 49. p. 140 of Babu Pertap Chunder Roy's translation.

² Darmesteter's Zendavesta, Rām Yasht, vii. 27. 28, Zamyād Yasht, vii. 41, Sacred Books of the East, vol. xliii. pp. 225, 296.

³ West's Bundahis, xxix. 12, comp. xi. 13, Sacred Books of the East, vol. v. pp. 120, 129, shows that Ātarō-pātākān was the Arian Vāj of the fire-worshippers, where the mother-river Dāntik rose. But this river, as its name imports, was the second (dānt) river, and was that sacred to a race later than the original mother-worshippers, whose sacred river was the Helmand.

⁴ The proof of this identification of Keres with Greek κέρας, 'a horn,' is given by the Hebrew *keres*, 'a horn,' and the statement in the Zendavesta (Yasna ix. 10, Sacred Books of the East, vol. xxxi. p. 233) that Keresaspa was the son of Sama or a Semite. The horns were the horns first of the Shahn, or ibex, next of the goat, and afterwards of the moon-bull, and were first the signs of earthly, and afterwards of heavenly power. It was with this meaning that the horns of the moon-bull were placed on the Jewish altar. The horse was the animal sacred to the Ural-Altaic Finns. See Part IV. of my Notes on the Early History of Northern India, J.R.A.S. April, 1890, p. 416. I may also here note that Karna, the charioteer king of the Mahābhārata, the great opponent of Krishna, or Vishnu, is probably a reproduction of Keresaspa. Karna was born on the river Aśva (the horse), and Karna-s-aspa is precisely the same word as Keresaspa if we substitute the Assyrio-Babylonian form of the word for horn (karni) for the Gr. and Zend form "keres." See Part V. of this series, J.R.A.S. July, 1890, p. 343.

pers, the Pairikas, or wicked disturbers of law and order, but the measurers of time. This alliance is recorded in the Zendavesta, which ascribes to Keresaspa the restoration of the rule of justice which had been disturbed by the murder of Urvakshaya, the ancient judge who was Keresaspa's brother. These people were the Semite-Kushites of Assyrian and Babylonian history.


*The Moon as Sacred Goddess of the Holy Land as shown
in Names of Countries.*

It was apparently these people who gave to the Akkadians their name as sons of Akki (the irrigator), who was the legendary father of the Great Sargon.¹ In the days when the Southern races were supreme in the land, we know that Assyria, or Northern Mesopotamia, was called Gutium, which is connected with Gud, the bull, and this is preserved in the name of the rites of Goetia, which is given by classical authors to the magical rites used in Greece before the Median magic was introduced at the time of the Median wars by a book attributed to the Median Osthaneas.² They were the Yātus of the Zendavesta, the irreligious race who worshipped Ia when he was allied with the goat-god, and was the great god of magic.³ These people were the ancient Magi, sons of the mother-earth Maga. But as these people went from the Persian Gulf to Asia Minor and India, they must have ruled the Southern as well as the Northern province. It was the Northern province that the fire-worshippers from Ātarō-pātakan first conquered, and it was there that in Babylon they found the observatories of the Southern star-gazers, and it was there apparently that with the help of the Akkadian calculations they found out that the moon, which had been regarded by the earlier astronomers as only ruling the single months and the ten sacred months of gestation, ruled the lunar

¹ Sayce, Hibbert Lectures for 1887, Lecture i. pp. 26, 27.

² Leornant, Chaldean Magic, pp. 238, 333.

³ Ib. p. 158.

year of thirteen months of twenty-eight days. Lenormant has shown that the name of the province immediately round Babylon is called Sumir in Assyrian literature and Shinar in Genesis.¹ This name Shinar is, as he shows, a Semitic rendering of an Akkadian name, which was originally either Sumer or Sungir,² and it is evidently from the latter form that the Semitic Shinar was derived, as the *š* certainly represents an Akkadian *g*. The Northern part of this country, moreover, is that between the Tigris and Chaboras, whence the city of Singara is placed in the ancient maps of Persia, and which is called Sindjar by Arabian geographers. It was here that the range of hills called by Ptolemy *Συγγάρων ὄρη* was situated.³ This was the country of Samiras, who is said by Abu-l-Faradj to be the first king of Babylon after Nimrod. He describes him as having three eyes and two horns.⁴ This description again coincides accurately with the picture of the head of the lunar bull in Mr. Brown's map taken from Ptolemy. In this the two horns are clearly *s* and *β*, and the three eyes are the three stars below the horns. It also agrees with the Akkadian (Tel-loh) sign of the wild bull . But these signs,



as well as the name Sin-gara, Sin-djar, and Shinar, together with the fact that this country was the latest conquest of the race who had adopted the moon-god of their predecessors, and had made it, under the Semitic name of Sin, the moon-ruler of the lunar year, all point to a close connection between the country and the moon. Thus as the country had formerly been called Gutium, or the land of the moon-bull, the Kushite-Semites called it the land of the moon (Sin) and Sin-gar.

This name of the land of the moon was also transferred to Mount Sinai, which became the mountain of the moon, and the names of this mountain also apparently indicate the course

¹ Lenormant, *Chaldean Magic*, pp. 393-398.

² *Ib.* p. 401.

³ *Ib.* 402. Lenormant quotes Ptol. v. 9, Dio Cassius lxxiii. 22, Ammian. Marc. xviii. 5. 20, Ritter, *Erd-Kunde*, vol. i. pp. 118, 158, 247, 696, 718, Layard's *Nineveh and Babylon*, p. 249.

⁴ *Ib.* 396, note.

of historical religious evolution. Its other name, Horeb, is also the name of an Egyptian king of the 18th dynasty, called Horus, or Hor-em-heb. The "em" here is merely a connecting particle, and the name is Hor-hib or Hor-eb.¹ *Hor* in Egyptian means supreme, and in Hebrew a mountain, and *hib* or *heb* is stated in Brugsch's Egyptian Dictionary to mean fishing or festival. But if the name of Sinai and Sin came to be attached to the holy mountain by the Assyrian Semites, who doubtless introduced the god Sin recorded in the Hymyaritic inscriptions of Southern Arabia,² it is probable that they had something to do with the earlier name Hor-eb. Now "ib" in Akkadian means "creator," and the name is preserved in that of the god Nin-ib, the lord or lady of creation, and thus it is exceedingly probable that Hor-eb meant the supreme creator, the sacred mother mountain, the Egyptian form of Nin-ib, which name was afterwards changed for that of Sinai when the moon became the lord and lady of creation.³

But if the Northern province of Sumer or Sin-gir was thus called after the moon-god, and if the name was also given to the holy mountain of Sinai, it is possible that there may be some connection with the province of Akkad South of Sumer and the mother-moon, as this was the country whence the emigrant mother-worshippers set out to find new homes when their old land had grown too narrow for them. Akkad, or Akki, is derived from the Akkadian verbal root Aka, 'to heap up,' and Ak-ki, 'the irrigator,' would mean heaping up earth (ki). The race of Akkadians are usually thought to have derived their name from the high or heaped-up country of their Eastern mountain mother-land. But the root Ak-a also appears as Ak-u, the Akkadian for moon, and as the Southern





¹ Brugsch, *Geschichte Egyptens*, pp. 251, 439. I am indebted for this information to Mr. Evans, of the Assyrian Department, British Museum.

² Sayce, *Hibbert Lectures for 1887*, Lecture i. p. 42, note 1.

³ This derivation is at least more probable than that given of Horeb in Hebrew dictionaries, where it is said to mean "desert, waste." Also the Egyptian king could not have been called "the supreme festival." The meaning "festival" is again directly derived from creation, as it denoted the day sacred to the god who, like all the ancient gods, was a "creator." Again, the meaning "fishing" points to the water-god as creator.

Akkadians certainly made the moon the ruler of the sacred ten months of gestation and also of the separate lunar months, they may have named the Akkadians first from the mountains of the East, and afterwards have connected it with *Aku*, the moon.

The Three Earlier Races Mongoloid, Australioid, and Ural-Altaic.

But we must now return from this digression to the three earlier races. These, the Mongoloid, Australioid, and Ural-Altaic, are probably those represented in the Telloh sign for country , while in the Egyptian , Hittite , and Cypriote  the original parent mountain becomes the plain of the mother-earth. I have traced these three races to their meeting place in the Euphrates valley. But these people had met in other lands before they united to form the imperial race of Assyria. The Mongoloid and Australioid races had coalesced in India, and both the earlier Mongoloid mother-worshippers of the coasts of the Mediterranean and the Australioid Danai had met with the Northern fire-worshippers both in Europe and Asia Minor. But these people had not only travelled by sea, they had also made their way by land, clearing and cultivating the country and establishing villages as they advanced. These, as population increased and the tribal movement continued to progress, gradually grew into kingdoms founded on the Dravidian model of the king's province or city in the centre and the frontier hamlets or provinces outside.

Evidence of Neolithic Monuments.

It is in considering this advance that we are able to connect the movements of these South-Eastern races with the monuments of the Neolithic Stone age. These are found all over Europe and Asia, and I think I may say that archæo-

logists are all agreed in thinking with Sir John Lubbock that "the Indian dolmens (stone tables, shrines or altars), cromlechs (stone circles) and 'tumuli' are identical in character with those occurring in Western Europe."¹

These stone monuments, which also include megalithic stones, must have been erected by a people who originally came from a stony hilly country, and who could not have been of the same race as the early Hindu ritualists who made their altars of earth, and who thought that they fertilized the earth and made it productive by pouring on it the blood of human victims offered as sacred food for the great mother, the author of all life. These people, when joined by the worshippers of the father-god, added to the altar the wooden stake called Yūpa in the Brāhmaṇas and Drupada in the Rigveda.² It was to this stake, which is in the form of the "linga,"³ that the victim was tied by the neck and stabbed so that the blood spurted over the "linga" and fertilized it as well as the ground in which it was fixed. The early stone builders do not seem to have had at first any share in this ritual, and their megalithic monuments were at first not phallic emblems, but memorial stones. It was not till they had united with the earlier ritualists that these stones became phallic and were recognized as perpetual signs of the father-god. But the great change which these people made in the ritual was in the introduction of stone altars in the place of those of earth, and of stone shrines in the place of the ships or arks of the earlier Akkadian gods. No one can look at the Telloh and Hittite signs for altar without seeing that they are much like the "dolmen," and there cannot I think be any doubt that these dolmens or shrines were originally used for sacrificial purposes. It would seem that the holes found in the side of Indian dolmens were used for the introduction of the blood of the sacrificial victim.⁴

¹ Lubbock, *Prehistoric Times*, second edition, chap. v. p. 129, also p. 104, note. ² *Rg. I.* 24. 13.

³ Part IV. Notes on the Early History of Northern India, *J.R.A.S.* April, 1896, p. 378; Eggeling's *Sat. Brāh.* iii. 7. 1. 8, *Sacred Books of the East*, vol. xvi. p. 174.

⁴ See illustrations to Lubbock's *Prehistoric Times*, second edition, pp. 120-121.

Evidence of Cup-marks and Jade Axes.

But there are also in the Neolithic remains of India and Europe other signs which show that the builders had probably adopted an advanced form of ritualism which must have been founded on Asiatic precedents. These are the so-called cup-stones and cup-marks on monumental stones and the jade axes found in the tombs.

As to the cup-marks. Prof. Boyd Dawkins, on the authority of Desor, Falsan and Mestorf, who have studied these stones in the West of Europe, says that these marks, which are "small round holes, seldom more than an inch to three-quarters of an inch in depth," are found "occurring sometimes on tombs and sometimes on isolated blocks of stone. They are called cups, bowls, basins, marmites du diable, and sometimes in Germany stones of the dead." Mdlle. Mestorf says that they are generally filled with butter or lard.¹ This last custom clearly connects them with the sacrificial butter of the Brāhmaṇas, the divine sap which binds heaven and earth together and gives life to all things.² This was the offering made to Rudra, the anthropomorphic father-god, and it was to propitiate him that the sacred butter was poured on each of the sacrificial dishes in proper succession.³

But these cup-marks point to a time before sacrificial dishes were used, and seem to be the transference to the stone altar of the "yoni" or sacrificial circle into which the sacred stake or yūpa of the sacrifices on the earth altar was fixed. It was the butter which was placed in these cups or "yonis," which replaced the blood of the victims which used, in the earth altar, to descend into the "yoni" after flowing over the "linga" or stake. It was probably blood which was placed in these cups in the early ritual, as among the Scandinavians it was always customary to redden the

¹ Boyd Dawkins, *Early Man in Britain*, p. 338.

² Eggeling's *Sat. Brāh.* i. 6. 3. 16, and ii. 4. 3. 10, *Sacred Books of the East*, vol. xii. pp. 146, 372.

³ *Ib.* i. 7. 3. 6 and 6, pp. 200, 201.

altars with blood for the bettering of the year.¹ But this custom was changed when burnt offerings were introduced. When the fire became the divine messenger which took the sweet savour of the sacrifice up to heaven, the sacred fat became the symbol of the divine life-creating power, the heavenly seed.² When the reformation of the worshippers of Ia, the heavenly bull, and lord of the sanctifying waters, took place, and sacrifices of the fruits of the earth, curds, milk and butter, took the place of the earlier animal sacrifices, the butter still continued to be the emblem of the seed, the origin of life.³

Whether these cups give in every or even in the majority of instances evidence of their correspondence with ancient divine numbers, I am not prepared to say; but certainly in two cases mentioned in the *Archæological Review* by Mr. J. M. Gow, the number of these cup-marks is very significant. Those he speaks of are at Comrie, near St. Pillans in Perthshire, and among the numerous monuments there he only names two instances in which cup-marks are found. In one case there are *eleven* of these marks on a megalithic stone, and in the other *twenty-six* on a group of three.³

As the megalithic stone regarded as a sacred emblem is a direct descendant of the wooden sacrificial stake to which the victim was tied, the number of cup-marks to receive the blood seems to point to the offering of eleven victims, a cup being set apart for each of them. This again corresponds with the number of eleven victims offered in India to eleven sacred months of generation at the great annual Soma

¹ St. Olaf Hermskunga, 115, quoted by Du Chailly, *Viking Age*, vol. i. chap. x. p. 345. Prof. Robertson Smith, *Religion of the Semites*, Lecture iv. p. 184, also refers to "the primitive rule of sprinkling or dashing the blood against the altar or allowing it to flow on the ground at its base," as hardly ever omitted except on altars not used for animal offerings, like the tables of show-bread and the altar of Manu. He also says that this practice was not peculiar to the Semites, but was common to the Greeks and Romans and ancient nations generally.

² See the myth of Mann, where he throws the heavenly seed into the waters to produce Ida the purified earth, Eggeling's *Sat. Brâh.* i. 6. 3. 23; also *Sat. Brâh.* i. 6. 4. 8-9, *Sacred Books of the East*, vol. xii. pp. 151 and 177; also Part IV. of my *Notes on the Early History of Northern India*, *J.R.A.S.* April, 1890, pp. 343-344.

³ *Archæological Review*, October, 1888, vol. ii. pp. 102-103.

sacrifice.¹ The group of three stones again seems to refer to the three seasons of the Northern races, spring, summer and winter, and the twenty-six cup-marks on them represent the twenty-six changes of the moon occurring in the thirteen months of the lunar year.

The jade axes found in these Neolithic tombs, which must have been imported from Eastern Asia into Europe, no jade being found in Europe,² also prove that the people who brought them must have looked on them as sacred objects. The names for jade, which is called nephrite or kidney-stone, and by the Spaniards "*piedra de hijada*" or loin-stone, points to a connexion between jade and generation, and generation was the special function assigned to the early gods. Again, its colour and its name in Turkestan, where it is called "*yeshm*," the eye, denote that it was made sacred after the moon-goddess became the guardian of mothers and the goddess presiding over gestation. The connexion between the eleven cup-marks and the eleven sacred victims offered to the gods of generation, already pointed out, appears also to explain the number of eleven jade axes found in the great sepulchral mound of Mont St. Michel at Carnac in Brittany.³

From these indications we see that the Neolithic stone-builders probably realized the conception of the divine triad; and if so, they must have acquired both their ritual and civilization from the earlier race who worshipped both the mother-earth and the father-god.

¹ Eggeling's *Śat. Brāh.* iii. 7. 2. 3, *Sacred Books of the East*, vol. xxvi. p. 170.

² I see that Prof. F. W. Rudler proved before the British Association on Sept. 5, 1890, that this assertion must be modified. Prof. Traube, of Breslau, has found jade at Jordansmühl and Reichenstein, in Silesia, and Dr. Berworth in the valleys of the Mur and Sann, in Styria. Jadeite has also possibly (though this is doubtful) been found at Ouchy, on the Lake of Geneva, and also at Mount Viso, in Piedmont. But there is in the newspaper reports of the proceedings no evidence of the existence of workings on a large scale in these places, or of special sanctity being originally attached to jade in Europe, whereas it has always been looked on as sacred in Eastern Asia.

³ Lubbock, *Prehistoric Times*, second ed. p. 155; also Part IV. of my *Notes on the Early History of Northern India*, *J.R.A.S.* April, 1890, pp. 400-402.

Evidence of Neolithic Lake-dwellings, and Language.

But the evidence of the civilization and culture of these Neolithic tribes is not confined to these stone monuments. Everywhere throughout Europe we find that the underlying stratum of the population who preceded the so-called Aryan races spoke, as Penka has shown, Dravidian or agglutinative languages, which were subsequently altered to admit roots altered or originally framed by Aryans and Aryan inflexional forms.¹ These earlier races are the tribes called Iberic, of whose ancient form of speech a specimen is preserved in the Basque dialects. They were the Asiatic immigrants whose outward march was from the South-East to the North-West, and who met the Aryan races in their advance from the North-West to the South-East.

In the Lake-dwellings of Switzerland and the hut-circles of England we find unmistakable evidence of the course taken by the Asiatic tribes.² These remains also prove that they were skilled agriculturists, who cultivated several varieties of wheat and barley, also millets, peas, flax, and fruit-trees. The foreign stocks whence the produce of these fields, gardens and orchards came must have been brought from Southern Europe or Asia Minor. Moreover, the fact that different kinds of the same crop were grown shows that the people who brought these stocks must have paid attention to the development of different sorts of grain best suited to different soils and aspects; and that they must have carefully selected seeds and preserved useful varieties.³ These people,

¹ See Penka, *Origines Ariarum*, passim, where the whole argument is an elaborate proof of the truth of this statement.

² For proofs of the following statements relative to the Lake Dwellers see Boyd Dawkins, *Early Man in Britain*, pp. 266-268, 293, 298, 300-302; also Lubbock, *Prehistoric Times*, second edition, chap. vi. pp. 166-214.

³ It has often struck me as strange that in discussions on the antiquity of civilization more stress has not been laid on the lapse of time proved by the great variety of kinds of cereals, pulses and vegetables. To take rice, I, when Settlement Officer in Central India, had a list of about forty different kinds of rice, most of which I was able to discriminate, as in discussions on the qualities of the soil, the ryots used constantly to point out certain kinds as infallibly indicating certain soils. But the number of kinds of rice is not restricted to forty or fifty.

moreover, had advanced beyond the stage when only goats and sheep were kept, and must have ploughed their land, as they had tamed the wild oxen indigenous to the country. The evidence further shows that the domestic animals, which accompanied these people (including the ass, which must have been brought from South-Western Asia), must have been introduced *en masse*, and not, as might have been expected, one after the other. In short, the people must have pushed their way to the North-West very slowly, as I have suggested in p. 734, founding as they advanced their villages and kingdoms, and assimilating the aboriginal inhabitants belonging to the race of dolichocephalic hunters of the early Stone age, whose remains are found in the caves of Belgium and France.

These people in their onward progress probably took with them signs which, like those of the Chinese, Coreans, and Japanese of the present day, are the common property of nations possessing common traditions, but using different languages.¹ They preserved their use by teaching them to the young, who, like the Hindus of the present day, used to learn from their teachers, the village elders, how to trace them in the sand under the village tree or shed. These young scholars also doubtless learnt with them the sacred numbers which explain so many of the signs, and the teachers were doubtless a class like the Akkadian "Asipu,"² diviners or interpreters, the predecessors of the sons of the prophets,

Dealers used to tell me of about two hundred kinds. The exceedingly great antiquity of the cultivation of rice in India is proved by the name "rice" and the Greek *ῥιζα*, both of which are derived from the Tamil "arisi." Rice was exported to Europe from the ancient sea-ports of Baragya, the modern Brouch and Sürpäraka (Surat), which were the head-quarters of the Western trade, and its exports must date from a time when the people in the West of Bombay and at the mouths of the Indus spoke Dravidian tongues, and the Aryan Sanskrit and dialects derived from it were unknown to the country traders. But before a foreign trade began, numerous varieties must have been developed, and the development of these varieties with the culture and agricultural skill necessary for their preservation must have required a vast lapse of time, to be numbered by hundreds if not thousands of years.

¹ A gentleman who was an accomplished Chinese scholar, but who did not know Korean or Japanese, told me that when on board a steamer going from China to Japan, he found he could make the Japanese and Koreans on board understand him easily by writing what he wanted to say in Chinese characters.

² Sayce, *Hibbert Lectures for 1887*, Lecture i. pp. 51, 52.

among the Jews. These numbers, as we see from the Hindu Brāhmanas, formed a most important part of the national religion, and they were almost certainly taught to the young of all classes before Aryan pride, exclusiveness, and lust of power, combined with Dravidian love of exactitude, made the priesthood into a separate caste. The ancient value attached to these numbers and their educational importance is further shown by the Akkadian system of assigning the name of a god to each whole number of the series between one and sixty, corresponding to his rank in the celestial hierarchy.¹ This series of sixty, again, was a segment equal to the sixth part of a circle of 360 degrees, and thus the names attached to the degrees formed *memoria technica* for enabling pupils to record the degrees of a circle.²

Insufficiency of Signs, and the Value and Importance of Myths or Sacred Stories.

But though these signs gave, as I have shown, a great deal of information, they could not have supplied the place now occupied by written literature. However useful signs, pictured symbols and sacred numbers may have been as means of fixing in the memory trains of reasoning recording national statistics,³ numerical deductions, and ritualistic observances and doctrines, they could not possibly have made history, religion, and early science popular. They could not have

¹ Lenormant, *Chaldean Magic*, p. 25.

² See also the dispute between Vandin and Ashtavakra in the Mahābhārata, Vana Parva, cxxxii.-cxxxiv, pp. 396-402, of Babu Pertap Chandra Roy's translation, where each of the disputants sets forth the divine truths vouched for by each of the numbers from one to thirteen (the sacred lunar number), Vandin taking the odd and Ashtavakra the even numbers.

³ Like the Peruvian quipus, or knotted threads of diverse colours, which, as Prescott shows (*History of Peru*, vol. i. fifth ed. pp. 112-114), were used to record national statistics, national stores, numbers of troops, births, deaths, and marriages, as well as annals, and the Indian wampum belts used to record treaties (ib. p. 115, note). The quipus or knotted cords were also used as recording instruments in China. In the Lushih of Lohi it is stated that Fuh-hi of the Fung family was the first king who used written documents instead of knotted cords. This is stated in an article by Mr. Allen, *Art. IX. J.R.A.S. July, 1890*, p. 519. The old Exchequer tallies of England are also survivals of the ancient methods of recording reckonings.

fostered national spirit, stimulated imagination and research, and encouraged the young to add fresh knowledge to that accumulated by the recorded wisdom of their fathers, nor could they have made their teachings household words.

In customary festivals and elaborate and striking ceremonies, proverbs, omens, charms, and incantations, a great deal of ancient lore was popularized. This also was impressed on the public memory and consecrated by the universally acknowledged necessity of propitiating by sacrifices and elaborate ceremonies the hidden powers who were able to work evil as well as to give prosperity. These also impressed on the public mind, which was not then distracted by a multiplicity of literature, the necessity of maintaining unbroken the traditional forms which secured the absolutely correct performance of sacrifices, sacred games, and ceremonies. But the great storehouse of all knowledge was the myth, the sacred speech or story (*μῦθος*), or folk-tale. It was in these myths that all history and science was preserved in a form which remained fixed in the memory of those who heard it, and which could be easily diffused and passed from mouth to mouth. Thus a story which had once been found popular, and which was accepted by the national teachers as an embodiment of divine truth, could be passed from one public gathering and festival and one friendly tribe to another with the certainty of being everywhere received with interest and looked on with reverence, as the critical spirit was then in its infancy. As the whole lives of these ancient people were passed in public in a way which we Northerners, accustomed to the exclusiveness of home life, find it difficult to realize, those stories which traversed with success the ordeal of the recurring criticisms of the national interpreters (*asipu*), and which were liked by the people, were one after another added to the list of myths accepted by those races to whom the folk-tale had become a cherished national possession.

But before we can completely realize the methods and ideas of the people who framed myths or sacred stories as the best means of teaching the young and rousing national interest, we must try to place before our minds in broad

outline the people and their surrounding circumstances, without encumbering the sketch with unessential details. In other words, we must try to put ourselves in their place. To do this we must fix in our minds the various stages in advance made by wandering unsettled tribes who grew into a large community of allied and united provinces, obeying one ruler, and the consequent records of progress they were obliged to keep. Taking first agricultural and pastoral tribes, we must understand how the early cultivators began by continually changing their settlements, living for a few years in each forest clearing, till the soil was exhausted, and then seeking fresh lands; how the pastoral tribes first fed their goats and sheep in mountain valleys and sought fresh pasture according to the changing seasons of the year. We must then picture these people as uniting, taming the wild cattle, and discovering that exhausted soils can be revived by manure, that crops like the wild rice, wheat and barley can be improved, and that rice can be sown in the same soil year after year by raising embankments round the fields for the storage of water. The next stage after their union as small communities is that reached when they were forced to seek fresh lands by the increase of their numbers, and when hamlets peopled by the swarms thus thrown off grew up round the parent village, which thus became the nucleus of a province. But even before this stage the growth of intercourse between neighbouring tribes must have begun, for this was made necessary by the early law of exogamy, which was apparently universal among the Dravidian matriarchal and patriarchal tribes. The observance of this rule either necessitated hostile raids to obtain mothers for the coming generations, or else friendly alliances between neighbouring communities. The first custom was, as is shown by the blame attached to it in traditions, apparently rare, and only obtained when two utterly alien races came into contact; while the second seems to have been the general rule, at least in India. Under this custom each community supplied fathers to the children of those who were to be the mothers of the other, A supplying

fathers to B's mothers, and B supplying fathers to A's mothers.

It was among a people whose minds as agriculturists had been saturated by fear of the unknown beings who brought storms and droughts, who as cattle herdsmen had lived in apprehension of cattle plagues, and of the attacks of other tribes looking for good pasturage, and who had both alike feared diseases and accidents, that religious rites arose. Religious rites were first fetish charms and offerings to avert the wrath or malice of those who controlled the dreaded influences, and formed the first bonds of national union. As population increased and feuds with neighbouring tribes began to spring up, the necessity for more widely extended unions and some common centre where national ceremonies could be celebrated and disputes adjusted began to arise. Men then began to look for one common god for the whole community of confederated tribes. This god was found in the mother-earth; but the mother-earth of each group of communities was not the same, and what distinguished her was a different name. The vendettas arising out of tribal feuds had already made it a matter of importance for those moving from one tribe to another to conceal these names, and the name came to be looked on as the most important attribute of each individual. It is this feeling that makes Hindu wives unwilling to mention the names of their husbands, and the Abyssinians to conceal the baptismal names of their children,¹ as they think that when the holy name is unknown, the sorcerers cannot harm them. But the importance thus assigned to the name through fear became transferred to the name as a mark of reverence, distinguishing the mother-goddess or god of the tribe. The prayer of

¹ This custom is quoted from Mansfield Parkyn's *Life in Abyssinia* by Mr. W. Simpson, in a letter published in *Folk-lore*, June, 1890, p. 273. This story also embodies a chapter in the history of the evolution of custom, for in Abyssinia the name by which the child is really called is not given to him in church, but by his mother on leaving the church, and this points to the time when it was the mother who was entirely responsible for the child till it was given up to the tribal elders. The story of *Rumpelstiltskin* in *Grimm's Household Stories*, and the cycle of stories connected with it, and the guessing of names, all furnish evidence of this wide-spread and deep-seated feeling.

Jacob, "Lord, tell me thy name,"¹ and the importance assigned to the name 'Yah' in the saying in the Bible, "then began men to call on *the name* of the Lord (Yah),"² are reproductions of the ancient stress laid upon the name which became the foundation of the myth, so that, as Dr. Tylor says, "all men feel how wanting in a sense of reality is a story with no personal name to hang to it,"³ and the use of the personal name as a mark of reverence was a great advance on the ancient phase of feeling which made it an unfriendly act only worthy of an enemy to name any living person or ancestor.

When once the names of the leading personages and their meanings were recognized, there was no difficulty in grasping its significance; but these names could not be, owing to the prejudice against the use of names of persons, those of individuals. While though ancient memories were capable of feats which appear incredible to minds trained on alphabetical literature, yet if myths had been encumbered with the names and adventures of individual actors, and not condensed by the use of symbolic names, serving the same purpose as algebraic signs, their weight would have crushed the retentive organs of even the most gigantic Gargantua of memorialists.⁴

As trade between neighbouring communities begun to extend beyond the limits of the market districts or places of meeting of adjoining communities, it became more complicated than the system of direct and immediate barter, and made records necessary. Uniting communities had also to keep memorials of the proceedings of their national councils, composed of the chiefs of the ruling city or village and the delegates sent from each of the subordinate divisions; treaties made between neighbouring communities had to be preserved, and the necessity of an effective system of record became every day more evident when accumulated experience, com-

¹ Gen. xxxii. 29.

² Gen. iv. 26.

³ Tylor, *Primitive Culture*, vol. i. chap. x. p. 394.

⁴ See as an instance, Miss Garnett's "Women of Turkey," *Nutt*, 1880, p. 349, where she tells how M. Verkevich and the brothers Miladinov in collecting Bulgarian songs, collected 275 from one woman Dafina, of Serres, and 150 from a young girl of Strouga.

bined with new inventions in agriculture, building and manufactures, made it more difficult to keep permanent notes of the successive advances made. History then began to be formed and religious and historical myths to be developed. But from the very earliest times the record of the sequence of the seasons must have been most valuable to agriculturists, and this became still more important to the early navigators. It was these last who must have been the pioneers of extending national and commercial interests, for it must have been they who, by using rivers and the protection of coasts, were first able to traverse great distances sufficiently quickly for the purposes of trade. It was thus that seasonal myths, which are probably the earliest form of permanent myths, grew up. But the watching of the seasons at a very early time developed into watching of the stars; for farmers, shepherds, and, above all, sailors, who were accustomed to watch the sky, soon began to realize that the position of the stars changed, and to connect this change with the passage of time.¹ These changes had to be recorded and the gradually accumulating knowledge could only be retained and used when systematized. The only method which, in the absence of writing, would suffice to keep the knowledge of different subjects separate, and make it permanent, was one which would place it in a form which would be so short as to be easily remembered, and so impressive as to be easily fixed in the memory. This was done by personifying the natural objects spoken of and giving them names which could be easily recognized by the hearers. When these supposed persons became actors in a tale in which the well-known names of natural objects or phenomena were represented as persons acting out the information it was intended to convey, and when this was made thoroughly interesting, it soon became common property. These accredited tales, prepared and circulated by the "asipu" or diviners, passed through Asia and Europe as the national

¹ It must be remembered that in early times farmers were obliged, like those now living in jungle districts in India, to watch their crops to protect them against the forest deer and pigs.

records of the wise men of the East, and it is these which are still preserved as the nursery tales common to all races. I may take as one special illustration of the importance of these tales that of the Briar Rose or Sleeping Beauty, as given in Grimm's Household Stories, and this might be multiplied into a number of instances nearly completing the number of original forms of each story, which with their respective variants make up the whole collection.

Meaning of the Story of the Briar Rose, or the Sleeping Beauty.

This is evidently a nature myth telling how the new year is awakened from its winter sleep by the kiss of spring. But the story contains other elements which commemorate the whole series of successive changes in the history of the year, and thus shows that its original form dates back to a time long before even the lunar year, which preceded the solar, became the recognized measure of time. In the first place, the year in this story is the sleeping princess, or the mother earth, and this points to the period when the opening month of the year was sacred to the mother, and was named after her, as in the Hindu Calendar, when it was first called Tai, the mother, before it was called Pūsh, the bull. The god who ruled the winter solstice, which closed the old year, was the father god, personified as Capricornus, the fish-goat, the form under which Ia was deified when he ceased to be the dark night, Io, or Rāma, the heavenly abyss, the *l'hom*. He was to be the father of the children of the new year.

Again, the fairy god-mothers of the year, or the months of the old year, were thirteen in number, representing the thirteen months of the lunar year. But one of the golden plates allotted to them was taken away, and only twelve remained for the new solar year. Consequently the thirteenth god-mother was angry, and decreed that the year princess should prick herself with a spindle on her fifteenth birthday,

and die. She came to give this fatal present after the eleven first god-mothers had given theirs, thus recalling the long past time when there were eleven months sacred to the generating gods. This was before two months were added to the calendar to make up the full period of thirteen lunar months, which two months, again, were the pair of fire-sticks, the father and mother of the divine heat, the author of all life. These were added to the year by the fire-worshippers, sons of Kuş.

But remote as these ancient epochs were, the fifteen years assigned to the life of the year princess point to a still more remote era. It tells of the first attempt to frame a year made by the Southern races living in the Persian Gulf, who made their year to consist of five seasons, and who looked on the ten lunar months of gestation as the most sacred period of time.

The twelfth god-mother, who shows the means of repairing the evil done by the thirteenth, represents the solar year, and the young prince is the Marduk, or young calf of the Babylonian solar year, and the Phalguna, or blooming hero, of the Hindu calendar, who kisses the year into life at the time of the vernal equinox. The whole story in its present form is evidently a northern myth framed in a country where the vernal equinox ushers in the genial time of spring, and not the burning heats of a southern April. But though it has thus been moulded by the northern sun-worshippers, it has evidently passed through other forms which successively commemorated its original southern origin, and which can now only be traced through the sacred numbers still preserved in the later version.

General Observations about Myths.

But this myth could not in its present form have conveyed immediately to those hearing it the information I have now extracted from it. To attain the objects aimed at by the myth-makers, it was absolutely necessary, first, that the

names of the personified heroes should show clearly the objects or phenomena which formed the groundwork of the story; and, secondly, that the persons about whom the stories were made should not be individuals. Both these conditions were necessary to produce striking and enduring mental pictures, and the names of persons living or dead were traditionally inadmissible, owing to the idea that they could only be mentioned by enemies, while their introduction could only tend to produce confusion and to divert attention from an instructive story to a mere episode of individual adventure. Again, narratives naming individuals and treating of actual occurrences would not only lengthen out the story and make it difficult to retain it permanently, but would also be quite inconsistent with the ideas of the old world. Even without the strong popular prejudice against naming individuals, they would scarcely have been spoken of in matriarchal times. In the tribal communities of those days individuals were held of far less account, and were less named and talked of, than in the later time, when the family and father were looked on as the natural units. Hereditary descent among the mother-worshippers was not looked on as a mark of distinction, and every member of the tribe was on an equality with the rest till he had shown by his personal prowess what he was worth. Even then the credit of his achievements was outside the tribal limits given to the community to which he belonged, whether tribe, city, or kingdom. Thus the rule of the Dānavas, or Dānus, in Egypt, was celebrated in mythic story as the marriage of the fifty daughters of Danaus to the fifty sons of Egyptus.

It was apparently, as we have already seen in the story of the Briar Rose, the matriarchal tribes of the South who first formed the skeleton foundations out of which later stories were evolved. And they, being a most practical people, made them in such a way as to convey valuable instruction in an interesting and easily-retained form. Having, like all nations with strong Malay affinities, vivid dramatic instincts,¹

¹ The love of the Chinese and Burmese for the drama is too well known to make it necessary for me to do more than allude to it. I may also point out that the Bengalis are as fond of plays as their Burmese cousins. The Bengali proverbs are especially numerous and striking.

they easily and naturally turned the pithy proverbial sayings which abounded in their speech into stories, which seemed to be tales of individuals. But in thus dramatizing these sayings, they made the key-notes of the proverbs the names of the actors in the story. In this way they showed their hearers the lesson they meant to convey. These early myths consequently bore a strong resemblance to the Moralities of the Middle Ages.

Rules for the Interpretation of Myths.

It may thus be laid down as an invariable rule in mythologic research that any attempt to interpret myths, whether historical, religio-historical or naturalistic, by treating the actors in them as individuals, must be utterly wrong. If the myth is historical, the characters must mean tribes or communities or a collection of tribes or communities. Thus the river in many early myths is said to be the father of certain heroes who are the tribes living on its bank. If it is religio-historical, the actors must be the divine persons representing the abstract idea of divinity, consecrated in the religious convictions of the nation. Thus, Apollo killing the Python tells of the conquest of the snake-worshippers by the Dorians who were the Northern fire-worshippers, who afterwards amalgamated with the Turanian sons of Kus. And the last thing that myth-makers would have thought of doing would have been to ascribe religious changes to individuals. They were the work of the race or of communities united as a nation. In a nature myth the persons named must be natural phenomena.

Indian Specimens of Nature Myths.

The nature myths were probably the earliest form of sacred story, and as they are found in a very primitive and easily detected form in India, that great conservative store-house of

ancient lore. Two instances, taken thence to illustrate the original construction and meaning of these old-world stories, will greatly help in making clear the meaning and cogency of the propositions maintained by me in this discussion.

The specimen myths I propose to select are (1): The Myth of Rāma and Sitā, which forms the subject of the great Hindu epic the *Ramāyāna*, and (2) that of Nala and Damayanti, one of the most beautiful episodes of the *Mahābhārata*, which moreover explains the whole poem. These two myths, besides showing how natural phenomena were interpreted and described in the form of a story, also throw great light on the methods and rules for constructing their poems, which were observed by the old writers of epic narratives.

The Myth of Rāma and Sitā.

This myth is given in what seems to be its most primitive form in the *Mahābhārata*.¹ It is as follows:—Dasaratha (he of the ten (*dasa*) chariots (*ratha*), the king of Ayodhya) had three sons; 1, Rāma (darkness), whose mother was Kauṣalya (the home (*aloya*) of Kuṣ or Kaṣyapa, the tamer of the moon, that is, the moon-worshipping Kushite race); 2, Bharata (the son of her who conceives, from *bhri* 'to conceive'), the son of Kaikeyi (the mother-earth, from *kū* or *kī* 'the earth'); and 3, Lakṣhman (prosperity or good fortune), the son of Sumitra, the good friend (*mītra*), that is, the vital power which makes generation possible. Dasaratha, who, as the ten chariots represents the ten months of gestation, the ten wheels of time,² was resolved to make his son Rāma regent, but Mantharā (the goddess of spells and incantations) warned Kaikeyi of his intentions. She accordingly went to Dasaratha, and reminded him that he had promised to grant her a boon whenever she might demand it. He admitted his

¹ *Mahābhārata*, Vana (*Drapada-harana*) Parva, cclxxvi.-ccxcī. pp. 811-863.

² The year chariot is in the cosmological hymn of the *Rigveda*, i. 164, 11-15, represented as having one wheel. In the name Dasaratha each month is represented as a one-wheeled chariot.

promise, and she insisted that Bharata, her son, should be made regent, and that Rāma should go into exile for *fourteen* years. Rāma was accompanied by his wife Sitā (the moon),¹ and by his brother Lakshman. He went South, leaving Bharata, who was unwilling to assume the sovereignty, to rule the kingdom after the death of Dasaratha. This took place immediately after Rāma's departure. In other words, in the fulness of time, when the period of gestation was completed, the son of the mother-earth, or the mother-worshippers, ruled the land, waiting for the time when the heavenly father Rāma and the moon-goddess should take over the kingdom. Rāma, in the forest of Daṇḍaka (the stick or club), that is, during the reign of the worshippers of Rudra (the club), the phallic god, had to fight Surpanakha, the daughter of Rākā (the mother of the mother-worshippers, allied with those of the snake, from the Akkadian *rek* 'a woman'), who tries to restore her lost sovereignty by devouring the moon when eclipsed. Surpanakha was the sister of Rāvana, the *ten-headed* giant of Lanka (Ceylon), the sacred island of the South, and the ruler of the mother-worshippers. She went to her brother Rāvana to complain of Rāma and Sitā, and he engaged Marisha (the black, that is the dark night unlighted by the moon) to help him in carrying off Sitā. Marisha enticed Rāma away in the form of a deer (the deer-god of the mother-worshippers), and in his absence and that of Lakshman, who had followed Rāma, Rāvana carried off Sitā, through the air to the dark regions of the South. Rāma heard from Jataya, the king of the vultures, whose wings had been cut off by Rāvana, where she had gone, and by his advice went for help to Sugriva, the deposed brother of Vali, king of the monkeys. Rāma, at Sugriva's request, killed Vali (meaning 'the strong.' Tamil Val,¹ Sanskrit Bala, Akkadian Bel), the god of tempests, and restored to Sugriva his wife Tūra (the stars). He then,

¹ Sitā originally appears to have been the furrow (the Pali *sitā* 'a furrow') in which seed is sown, but became the moon, or rather its path, when the moon was made the heavenly bull, or cow who ploughed the plains of heaven, and marked out the course of the year.

by the aid of Hanuman the Monkey son of Pāvana (the wind), crossed the sea to Lanka.

In the meantime Sitā, while imprisoned in Rāvana's castle, had been comforted by Tri-jatā (the triple born of the three mothers of the mother-worshipping races), who was one of the Rakshasas and who was made her attendant. Sitā refused to be seduced by Rāvana (who is called the "night-wanderer," the ruler of the moonless nights).² After a long contest, every phase of which is significant, Rāma slew Rāvana and his host, and having rescued Sitā returned to Ayodhya, where Bhārata gave up the kingdom to him.

The whole story is clearly an account of how the full moon wanes and finally disappears from sight during the last fourteen days of the lunar month, which are the fourteen years of Rāma and Sitā's exile. Her final disappearance is represented by her rape by Rāvana, and her rescue means the return of the new moon. In the course of the story the triumph of the dark night lightened by the moon and stars is further represented by the conquest of Vali, the god of tempests of the monkey race who had obscured the stars. Bharata again represents the mother-worshipping Bhārata of the Rīgveda and Mahābhārata, who ruled the country before the moon-worshipping Kushites. The meaning of the whole story appears clearly in the names of the triad of gods who are still worshipped at the great temple of Jagannath: Rāma Chandra or Rāma of the moon, son of Kauṣalya, Rāma Balbhudder (the strong Rāma, the Lakshman of the story, the father-god, who gives strength and prosperity), and Subhadrā (the blessed one), that is, Sitā, the moon goddess or the heavenly mother. In the Mahābhārata the story is told to illustrate the rape of Draupadī, the wife of the five Paṇḍavas, by Jayadratha, king of Sindhu (the moon-country), and is evidently the original of Draupadī's abduction. Only, Draupadī is not the moon, but the daughter of Drupada (the sacrificial post), that is, of the sacrificial flame miraculously born in

¹ Caldwell, *Comparative Grammar of Dravidian Languages*, p. 489.

² Yana (Draupadī-harana) Parva, cclxxx. p. 828.

answer to the invocations of the impure Brahmin Yāja,¹ and he was taken from the moon-worshippers by the Pāṇḍavas, who were the descendants of the Sun god and were the gods of light, the five seasons of the solar year as distinguished from the lunar year, which was ruled by the moon and Rāma the darkness.

The myth of Nala and Damayanti.

This story, which has been put into English verse by Milman, forms, like that of Rāma, an episode in the Mahābhārata.² Nala means conduit or channel, and Damayanti is translated by Böhtlingk-Roth as meaning "her who is being tamed." The whole story shows how the wind is forced to travel in the channel allotted to it by the gods of order. Nala was the son of Viru-sena, the worshippers of the father-god Viru. He was the chief of all the kings of the Nishadhas or aboriginal races. Nala loved Damayanti on hearing of her beauty, and told his love to the swans, who bore the tidings to her as swiftly as the wind. She was the daughter of Bhima (the terrible one), king of the Vidarbhas or double (vid) snake race (arba), the mother and father worshippers. His kingdom was on the west coast of India, at the mouths of the Tapti and Nerbudda. Damayanti, his daughter, was the "untamed" but gentle wind. When Bhima proclaimed a Swayamvara, or festival for the choosing of a husband for Damayanti, Nala went to it, and on his way met Indra and the heavenly gods, who chose him as their messenger. He then entered Damayanti's apartments *unperceived* (Sects. liv.-lv.). She chose Nala from among the assembled princes, among whom were Indra and the gods of heaven, and bore a son, Indra-sen, and a daughter, Indra-senī, or the gentle fertilizing rains (Indu the "water-drop"). The first period of their married

¹ Mahābhārata, Adī (Chaitra-rathā) Parva, clix. pp. 479-483.

² Mahābhārata, Vana (Nalo-pakhyana) Parva, meaning the section devoted to "the ripening of Nalo," lil.-lxxix. pp. 157-234.

life represented the spring-time when the winds blew softly and spring-showers freshened and stimulated the earth. But all this time Kuli the black storm-wind, who had been rejected as a suitor by Damayanti, was nursing his wrath, and at the end of the *twelfth* year of the marriage he prepared the misfortunes of the thirteenth year (sacred to the moon, and the lunar year of thirteen months) by entering into Nala's mind as an evil spirit and making him gamble with Pushkara. Pushkara, the heavenly lotus, was the moon-god who ruled the summer solstice,¹ when the fierce heat burnt up the earth and destroyed the harmony of nature.

In this gambling-match Nala continually lost, till at last he was completely beggared and resigned his kingdom to Pushkara. But before this final catastrophe Damayanti, alarmed at and fearing the consequences of her husband's losses, sent Varshneya (the rains of the rainy season), Nala's charioteer, with her children to Kundina, her father's capital on the West coast, whence the south-west monsoon comes up to refresh the country parched by the summer's heat. Varshneya left them there, and then came up as the south-west monsoon to Ayodhya, where he took service with king Rituparna, the roll or book (parna) of the seasons (ritu). Pushkara, when he had defeated Nala (or the orderly course of nature), turned out him and Damayanti into the forest. Nala lost his cloth, the last remnant of his power of control, by trying to catch with it some golden birds (the clouds), who took it up to heaven. He then, as in the time of the storms at the opening of the rainy season an orderly direction of the course of the wind was impossible, deserted Damayanti. The two henceforth went different ways. Damayanti, wandering alone, was seized by a serpent, but was rescued by a hunter who killed the serpent. This hunter on soliciting her was struck dead, like Orion, the hunter constellation, who was killed by Artemia, and whose dis-

¹ Part II. of my Notes on the Early History of Northern India, J.R.A.S. April, 1889, p. 321.

appearance in autumn is the prelude to rains and storms.¹ After meeting with religious ascetics who promised her a happy end to her misfortunes and then disappeared from sight, she met a merchant's caravan who were going to the city of Savāhu (the good wind), but they were attacked and dispersed by elephants (the autumn storms), and Damayanti with some Brahmins made her way *northwards* to the city of the Chedis. The queen-mother, who was her aunt but did not recognize her, made her waiting-maid to her daughter.

Nala on leaving Damayanti sees part of the forest burning, but passed through it safely. He found in the midst of the flames the snake Karkotaka, the black (kar) tip (kota) of the fire-stick, or the god of the fire-stick, who became the planet Mercury and ruled the early autumn.² Karkotaka said he had been cursed by Narada,³ the spirit of the human race (Nara) and could not free himself from the fire (the heat of summer) till he had been taken up by Nala, that is, till the course of the year had been laid in the right channel (Nala). Nala took him up and was going to drop him where there was no fire, when the snake told him to count his footsteps. At the *tenth step*, when the time of the new birth had arrived, the snake bit him and thus changed his aspect and destroyed his beauty. The change, he said, was for his good, and he told him to go to Rituparna in Ayodhya as his charioteer Vahūka (the wind-god), and gave him two pieces of celestial cloth (the clouds). On the *tenth day* Nala came to Rituparna's city and was engaged as charioteer with Varshneya (the autumn rains) and Jivala (the victorious hero).

But all this time Bhima, Damayanti's father, was distressed,

¹ Encyclopædia Britannica, vol. xvii. p. 844; Aratus, *The Phenomena* or *Heavenly Display*, translated by R. Brown, jun., F.S.A., 635-646, p. 61, tells how Artemis sent the scorpion, the Zodiacal sign of the early autumn, to kill Orion, but that Orion instead slew him, and that henceforth the constellation Orion flies, that is, sinks, below the horizon when the scorpion appears.

² Part II. Notes on the Early History of Northern India, J.R.A.S. April, 1889, pp. 320 and 297.

³ May not this be connected with the Babylonian Ner, or great period of 600 years? Thus Narada would represent the accumulated wisdom of ages.

at hearing no news of his daughter, and sent out among other Brahmins Sudeva (the god of good fortune) to look for her. He came to the city of the Chedis, was recognized by Damayanti, and told the queen-mother who Damayanti was. She told him that she and Damayanti's mother were daughters of Sudarman, king of the Dasharnas. When her sister married Bhīma, she married king Vira-vāhu, the fructifying wind (vāhu) which came from the north. The queen-mother sent Damayanti home to her father, and Damayanti on arriving sent among other Brahmins Parnāda (the record-keeper) to look for Nala. Parnāda came to the court of Rituparna, here called Bhangāsuri, but did not recognize Nala or Vahūka. He, however, told Damayanti of a saying of Vahūka's that a woman deserted by her husband should not be angry *when he left her overwhelmed by calamity and deprived by birds of his garment when trying to obtain food*. Damayanti hearing this sent Su-deva to Rituparna to tell him that on the day after he made this announcement Damayanti would choose another husband. Rituparna told Vahūka (Nala) that he must take him to the Vidarba country in a day. Nala choosing horses of the Sindhi country (the country of Sin, the moon), harnessed them in the chariot, and they then rose in the air. Rituparna, the son of Bhangāsura,¹ the lord (asura) of divisions (bhāga), dropped his garment, the cloud mantle which no longer covered the sky at the close of the rainy season, but would not stop to pick it up. He then taught Nala the art of calculation by reckoning the number of leaves and fruits on the Vibhitaka tree.² When he had learnt how to calculate and control in due order the times and the seasons, the spirit of Kali (the black lawless tempest) went out of him. When he and Rituparna came to Bhīma's court, Damayanti recognized the rattle of the car, but on looking for Nala only saw Rituparna and Varshneya. She sent her maid Keshini to look for him. She on coming back told

¹ Vana (Nalopakhyaṇa) Parva, lxxi. pp. 212-214.

² The Terminalia Bellerica, called in the vernacular Arjuna, the tree which produces the Myrobolans of commerce.

her how Vahūka, Rituparna's cook, controlled the elements, how he merely looked on vessels to fill them with water, that on going through a low passage the passage rose to let him pass through, how he set fire to grass by holding it in the sun and was not burnt when he touched fire, and how flowers pressed by him, grew brighter in colour and smelt more sweetly than before.¹ Damayanti then sent for Vahūka and the two recognized one another. Then Nala and Damayanti went back to their kingdom, and Nala, by the help of the arts of calculation and control he had learnt from Rituparna, recovered the sovereignty from Pushkara the moon-god.

The whole story evidently depicts the course of the wind and its fluctuations through the year in those countries where the monsoon winds blow. The first part tells of the spring, the burning summer and the seemingly uncontrollable tempests of the rainy season, during which the controller and she whom he is to control are temporarily separated. The last part tells of the return of law and order in the later autumn, when the North and East winds blow, and the complete restoration of peace and harmony, and the undisturbed ripening of the winter harvests in the cooler season, which marks the close of the year, ruled by the moon-god Pushkara. Thus, the whole story was framed before the Solar year deposed the moon from her former place as the measurer of annual time.

*The Story of Nala and Damayanti reproduced in the Plot
of the Mahābhārata.*

It was this story which formed the foundation of the plot of the Mahābhārata. This, like the story of Nala, turns on the loss of their kingdom by the five Paṇḍava brothers, the five seasons, in a gambling match. It was lost by Yudishthira, the son of the god Dharma (justice or righteousness), the eldest of the brothers, to Shakuni, the son of the

¹ Vana (Nalopakhyaṇa) Parva, lxxiv, lxxv. pp. 220-224.

king of the Gandhārvas, the race of Visvāmitra, the moon-god, and of the sons of Kuś, worshippers of the moon. This represented the burning summer season which had been ushered in by the winter season of the generation and education of the five heroes, the spring season of the rule of law and justice under the supremacy of Yudishthira. The summer was followed by the disturbances and tempests of the rains, and the rule of the lunar races represented by the *thirteen* years exile of the Paṇḍavas. This was followed by the great battle of eighteen days, representing the storms of autumn and the death of the old year. In this great contest and its sequel, all the contending heroes of the ancient reckonings of the years were killed or died, except Arjuna (the fair hero), otherwise called Phalguna (the blossomer), who henceforth ruled the country as the young god of the vernal equinox and the solar year.

Religio-Historical Myths.

But to complete the account of these ancient myths, their teaching, and the rules for interpreting them, it is necessary to give some further instances of the religio-historical myths, which, though later than those which interpret natural phenomena, are the only records of the past which, when their original form can be detected, still preserve for us in the language of the long silent races of almost forgotten eras, their interpretations of the lessons of nature combined with their remembrances of the history of ages still more remote than those in which these stories were framed. But, in interpreting and disentangling these myths, we have first to remove from them those incrustations and additions which have been added to the old stories by the individualizing spirit of the family bards of the Aryan tribes, by later poets, and by historical revisers trained in the later school of individualistic history. These last had utterly discarded the methods of the past, and what were once the veiled records of an age which forbore from feelings of

traditional reverence to connect events and individuals together, became in their hands a means of celebrating as ancestors the mythic actors in the sacred dramas of a most religious race, who retained no memory of their fathers or mothers and whom they scarcely knew, if indeed they knew their fathers at all, but who gloried in the achievements of the tribe to which they belonged, and to which they owed their nurture, training, and education. It was the tribe which, in their mind, occupied the place held in the minds of the Northern races by their fathers, and especially their mothers.

The Story of the Flood.

I have before in this essay, and those preceding it in this series, spoken of the flood-story, and have shown how it was at first apparently a nature-myth, telling of the death of the old year, which was killed by the late autumn rains of the Euphratean delta. I have also through the Hindu accounts in the Brāhmaṇas and Mahābhārata connected it with the Babylonian story, and with the still later though exceedingly remote time when it was Manu (the thinker), the father of the human race in the Rīgveda, who was saved, and his daughter Iḍa rose out of the waters of the flood as the earth purified by the sanctifying water of life sent down from heaven by the god of righteousness, who was determined to remove iniquity from the earth.

I have also from evidence taken from the Hindu Brāhmaṇas, Rīgveda and Mahābhārata, shown that the first signs of a spiritual worship, as distinguished from that of the anthropomorphic gods, was shown in the deification of fire as the divine heat, and that fire-god was the supreme god before Ia, the water-god.

But the whole series of evidence on which these deductions are founded is still further corroborated by the Babylonian account of the flood, as given in the great Epic of Izdhubar which had come down to the Babylonians from the Akkadians.¹

¹ Lenormant, *Chaldean Magic*, pp. 188, 189, identifies Iz-dhubar (the man of fire), the sun-god of the solar epic, with "Bar" or "Bil-gi," the Akkadian fire-god.

This story tells how Anu the god of heaven (Akkadian *ana* or *an*), Bil the fire-god, Ninib the lord or lady (*nin*) of creation (*ib*) and En- or In-nugi¹ the leader (of the gods), were sitting together and consulting upon the reformation of the earth. With them, but apparently apart, was Nin-igi-a-zag the first-born (zag)² of the lord or lady (*nin*) of the race of heavenly spirits (igi-u)³ or of the spirits (*i-gi*) of water (*a*). This assembly was clearly that of the sacred pentad formed after the addition of the fire and water gods to the old triad. Thus, the triad here was Anu the heavenly abyss, Ninib the generative power ruling creation, and En-nugi the great serpent or the father; and with them among the older gods was the fire-god (Bil or Bil-gi). They were the gods of earth, and were the Elohim or gods of the Elohist account in Genesis. While the fifth god Ia belonged to the spirits of heaven.

They determined to destroy the city of Surippak, which Lenormant has identified with Ur,⁴ which thus gives the story a more realistic tinge than it had in its oldest mythic form for the destruction of Ur, the seat of the empire of Ur-Bagas, and that succeeding Telloh as the imperial capital, implied the triumph of a new race bringing in new gods.

Ia whispered the news of the deliberations of the gods to the reeds and the walls, who conveyed it to Atrā-hasis

¹ En-nugi has exactly the same meaning as Mul-nugi, as both En and Mul mean lord. Nugi in Akkadian means "of no return"; but Mul-nugi, besides being "lord of no return" or of the lower world, is also, as Dr. Sayce has shown, the moon-god of Nipur and the eldest son of Mul-lil the lord of the dust (*lil*) or the earth-god, and is in one of the deluge tablets with which I am now dealing called, as eldest son of Mul-lil, Mul-nugi (Sayce, Hibbert Lectures for 1887, Lecture iii. pp. 154, 155). I have in Part III. of this series of papers (J.R.A.S. July, 1889) suggested that "Nugi" was probably used by the successors of the Akkadians, or else by the Akkadians themselves, as a name meaning snakes, and that it came to mean the snake gods, the Nagas of the Hindus, and the Naga or snakes depicted on the Parthian banners. Thus En-nugi would mean the earth-god, the lord of the Naga, the Great Nahnsha of the Hindus.

² Sayce, Hibbert Lectures for 1887, Lecture ii. p. 14, note 1, gives "first-born" as the meaning of Zag.

³ Ib. Lecture iii. p. 141, note, says the "igigi" or spirits of heaven were denoted in Akkadian by the number nine, that sacred to Vishnu, thus giving further proof of the connection between the Akkadian In, the Hindu Yajnas or worshippers of Ya and Vishnu who was their god.

⁴ Lenormant, Chaldean Magic, p. 397.

or Khasisatra (the experienced man), and told him to build a ship. He consulted Ia whether he should tell the men of Surippak. Ia told him to say to them: "As Bil (the fire-god) hates me, I will not remain any longer in his country, but will go to the ancient waters and live with Ia."¹ He accordingly built a ship and went away in it when the flood came, having, as he said, "left my house and all that was in it to Puzur-Bil (the fire-god)." In other words he forsook the worship of the god of fire and worshipped Ia as the supreme lord. When Atrā-hasis was saved, and offered the sacrifice of expiation on Mount Nişir, Bil was with the other gods attracted by the sweet savour of the sacrifice, and when he found that Atrā-hasis, whom he hated, was saved, he was angry with the gods of Igi-gi (the heavenly spirits), but Ia interceded for Atrā-hasis and procured his pardon.

This story fully corroborates the history of religious evolution I have taken from the Hindu sacred books, and proves that the story of the flood in one of its later forms, which is that given in Genesis, gives the history of the religious reformation caused by the substitution of the worship of the gods of heaven for those of earth. While the comparison of this with the Hindu story shows how Ia, the supreme god of the waters of heaven, became Manu the thinker.

It also clearly connects the Ia of the Babylonian story with the Yah of the Jews, and this is further corroborated by the occurrence of the number seven in the Jehovistic version of the order given for the preservation of the animals, according to which Noah was ordered seven of each clean species. This was the number sacred to Ia, and became so through the addition of the days sacred to the fire-god and the water-god to the original sacred pentad. The comparison of the various stories also shows how the originally mythic actors have been gradually individualized by the infusion of the Aryan spirit. It is this spirit which,

¹ This whole account of the deluge I have taken from P. Jensen's *Babylonische Kosmologie*, Strassburg, Trübner, 1890, pp. 375-383.

in the hands of the several recensionists of the Book of Genesis, who are now admitted by all Biblical commentators to have gradually and by successive stages formed the book now found in our Bibles, has turned a compendium of ancient religions and perhaps national history into a didactic story of the supposed destruction of the wicked people of a former age.

The Story of Jacob.

But to prove the working of this innovating spirit, and to show how the Turanian sacred story was altered by Aryan historiographers, I will now turn to the story of Jacob, the father of the Hebrew tribes. Jacob was the supplanter or successor of Esau, and as Dr. Robertson Smith shows,¹ most scholars, from Scaliger downwards, have compared Esau with Uzaus, the god who taught men to clothe themselves with the skins of beasts taken in hunting, that is, with the skins of gazelles or mountain goats, and who was afterwards the Assyrian goat-god Uz, who was represented "as clad in a robe of goat's skin, the sacred dress of the Babylonian priests."² This ancient reverence for gazelles has been already referred to in this essay in the account of the historical transformations of Ia, and is also noted in the song of David, taken from the book Jashur, and lamenting the death of Saul, where it said, "Thy gazelle, O Israel, is slain in the high places."³ Jacob, who supplanted Esau, clothed himself in goats' skins and went to Haran, the city of the moon-god, where, as Dr. Sayce shows, the "god of the foundation was Laban, the white one or the moon,"⁴ that is to say, he became the goat-god who was first the god of generation and afterwards became sacred to the moon. He there married the two daughters of Laban, Leah, the wild

¹ Robertson Smith, *Religion of the Semites*, part i. 1890, p. 448.

² Sayce, *Hibbert Lectures for 1887*, Lecture iv. p. 285.


³ *Il. Sam.* xix. 1.

⁴ Sayce, *Hibbert Lectures for 1887*, Lecture iii. pp. 163, 164.

cow, and Rachel, the lamb or ewe.¹ That is to say, he became first the moon-bull or Ia, and afterwards the solar ram. But he had also two other wives, Bilhah and Zilpah, and these wives may be again compared with the two wives of Azi-Dahūka, the snake-god of the Zendavesta, Savanghāvāch and Erinavāch. Bilhah, compared by Delitzsch with בִּלְהָ old, is probably the Turanian *val*, the Sanskrit *cala*, and the Akkadian *bel*, meaning 'the strong,' and this interpretation is confirmed by the name of her son Dan, who evidently represents the widely-spread race of the Dānava, Dānus and Danai. This great Danite race is again reproduced in the name of the son of Dan, who, it must be noted, is the only one of the sons of Jacob who has only one son. This son is named in Gen. xlv. 23 Hushim, which, as noted by Dr. Smith, is a plural form. But this name Hushim again appears in Numbers xxvi. 42, in another plural form, Shuham, so that the two names mean the Hus and the Shus. These names again point to the Hus of the Zendavesta and their great king Hušrava, the glory (srava) of Hus, who conquered Kangdesh or India, and avenged the murder of Syavarshan by the Turanians. They are also the same people as the Sus of the great province of Susiana, and the Saus or Sauvarna of India, who were the great trading race which united with the warlike tribes of the Sinha-bunsis, the sons (bunsis) of Sinha or Som (the moon) to extend the rule of the merchants of the Euphratean countries over the whole of the Gangetic valley.² Zilpah again, who apparently represents Zillah, the wife of Lamech, and who is, in the Lamech-myth, the mother of Tubal-Cain, the father of the metal-workers and worshippers of the fire-god, is identified with those people by her son Ashur. His descendants seem to be the Asura of the Hindus, and it is the tribe of Ashur who in the book of Joshua are

¹ Franz Delitzsch on Genesis, Clark's Foreign Theological Library, vol. xxxv. fifth edition, 1887, p. 170.

² See Smith's Dictionary of the Bible, p. 384, s.v. Dan.; Part V. of this Series, J.R.A.S. July, 1890, p. 541; Darmesteter's Zendavesta, Ashi and Zamyād Yasts, 41 and 43, and 74 and 77, pp. 278, 303, 304, and Part II. of this Series, J.R.A.S. April, 1889, pp. 256-262.

assigned territory including that of Tyre. The chief god of Tyre was Melgarth, the Tyrian Hercules, or the god first of the phallic club and afterwards of the fire-stick. We see thus in the story of Jacob a reproduction of the transformations of Ia, in which he was first the god of the gazelle, afterwards of the goat and phallic god and then of the fire-god. In Leah the wild cow we find Ia again as the moon-god, and her tender eyes mentioned in Genesis xxix. 17 are explained by the three eyes of the wild bull of Telloh  she being the wild cow.¹ Rachel again, the ewe who carries off with her the phallic emblems or teraphim,² is the mother of Benjamin, from whose tribe Saul was born. Saul again, in his earlier form, and before he was recorded as the first king of Israel, as Dr. Sayce shows, was the sun-god, the Sawul of the Babylonians, and the Saul of Rehoboth, king of the Edomites;³ so that throughout the same historical idea has been preserved, and Ia, or Jacob with his four wives, is a complete reproduction of the Akkadian succession of religious beliefs as shown in the story of the flood and the other evidence I have adduced in this essay, with that set forth in Hindu religious history and in the Zendavesta. In the story in Genesis Jacob, it is true, does not, like the Thruetāona of the Zendavesta, take the wives of his predecessor, but his daughters; but the original story, which was changed afterwards, doubtless, if the explanation I suggest is accepted as true, made them the wives of Laban. The expedition of Laban to recover them, which is unmeaning when his object is, as set forth in Genesis, to recover the teraphim, is perfectly explicable if Leah and Rachel were, as in the Zendavesta, his wives.

That this is the true or nearly the true account of the story of Jacob is shown to be probable by the inscriptions of Thothmes

¹ That Babylonian signs were used by the people of Palestine is proved by the Cuneiform tablets found at Tell-el-Amarna in Egypt, containing Cuneiform reports from Palestine.

² That the teraphim were phallic emblems is made exceedingly probable by I. Samuel xix. 13-17, where the story is told of how he put the teraphim, with a pillow of goat's hair, to represent David in bed.

³ Sayce, Hibbert Lectures for 1887, Lecture iii. p. 181.

III. of Egypt, quoted by Dr. Sayce,¹ which mention among the cities he took in Palestine, more than two centuries before the time assigned to the Exodus by Egyptologists, Yakub-el, or Jacob the God, and Iseph-el, or Joseph the God, showing that they were both old gods of Palestine, who could never by old myth-makers have been spoken of as individuals. It was he who learnt the true name of God, the Yah,² and put away strange gods.³ His identity with the ancient moon-god is shown in his thirteen children. These originally included Dinah,⁴ who, like Dus-shala, the one daughter added to the hundred sons of Gandhāri the moon-goddess,⁵ was necessary, according to matriarchate ideas, to perpetuate the race and secure an alliance with adjoining tribes. Under the symbol of the thirteen children is shown a complete epoch, as set forth in Joseph's dream, where the sun, moon and eleven stars make obeisance to him,⁶ but this was doubtless originally the moon and its twelve companion months, the sacred number of eleven stars still retaining the remembrance of the eleven annual victims offered to the gods of generation in the Hindu mythology. The eleven stars also seem to refer to an ancient division of the heavenly sphere into eleven segments, similar to the Babylonian circle of ten stars preserved by Bērōssus. In short, Jacob, or Yakov, seems to be the righteous god Ia, who succeeded the goat-god and the moon-god, and who became the father of a holy people, who were appointed to work out the law of righteousness he taught. Of this law Iseph-el, or Joseph, the father of the Ephraimites, the first Semitic race ruling in Palestine, was the "Asipu," or interpreter.

In the above short abstract of the probable meaning of some obscure myths, the interpretation of the last two is

¹ Ib. Lecture i. p. 51.

² Gen. xxxii. 29-30.

³ Gen. xxxv. 4.

⁴ Her name, as Dr. Smith shows in the Dictionary of the Bible, p. 381, is very like that of Dus, and thus she would be the female form of the male Damm, united to the Ephraimites of Shechem, and the feud between them and Simeon and Levi, recorded in Genesis, is merely another form of the enmity against the sons of Joseph shown in the story of Joseph and his brethren.

⁵ Mahābhārata, Adi (Sambhava) Parva, cxvii. p. 341.

⁶ Gen. xxivii. 6-9.

made most difficult by variations and revisions; but I think I have shown, in spite of the alterations made by later authors who misunderstood the ancient methods of myth-makers, that the old myth was, in the eyes of its authors, not a story of individuals and their achievements, but an embodiment of truths much higher and more exact than those which could be conveyed in a narrative history, and that it was to them a solemn statement of truth in its best sense, as representing the accumulated wisdom of all their tribal ancestors. This symbolism was entirely unintelligible to the later revisionists, who lived in a time when history was assuming the narrative form, and who consequently thought that, historically, myths must, like a history written by themselves, contain the stories of individuals who really lived on earth.

But when the methods and objects of the myth are really understood, we see at once that the people, whose past I have tried to review, possessed all the characteristics laid down in Renan's definition. They spoke widely-extended languages, and had a recorded history, religion, and legislation, for governments of extensive countries could not be carried on without definite laws; while their literature, though it was not written in alphabetical characters, set forth the teachings of the past and the records of the present in signs, and sacred numbers, which, to seeing eyes and understanding ears, told their story much more clearly and certainly than written statements could do. While in their mythic tales they possessed a literature which interested all hearers, remained permanently fixed in the popular mind, and kept alive the remembrance of the deeds, and the instructions of their tribal ancestors.

ART. XV.—*The History of the Mosque of Amr at Old Cairo.*

By EUSTACE K. CORBETT.

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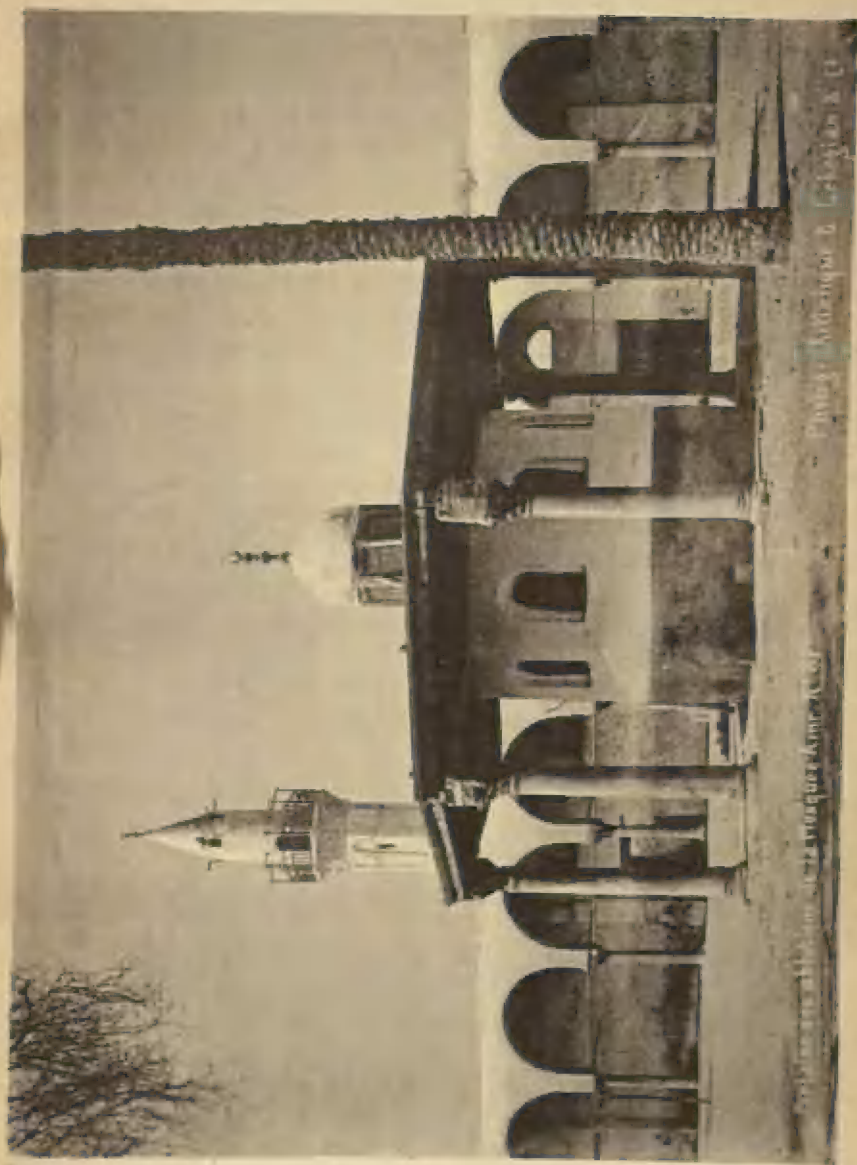
I.—MOSQUE OF THE PRESENT DAY, etc.

THE traveller in Egypt who wishes to visit the Mosque of Amr may now leave Cairo either by train or carriage, and step out in the immediate neighbourhood. But he who prefers the most picturesque and interesting route will either ride or walk, and taking the street which runs parallel to the Khalig, or Canal of Cairo, will pass out of the town by the gate of Sayyida Zeinab. Following the road past the picturesque little Mosque of Zein al Ābidīn, he will pass under the Aqueduct, and proceed along the track which leads him through a country of mounds and dust-heaps past the Mosque of Abu-s-Suūd to the N.¹ front of the building

¹ To avoid confusion, I have adopted throughout the terms of orientation as given by Al-Makrizy. He treats the *Kibla* side of the Mosque (i.e. that supposed to be directed towards Mekka) as *south*; and names the other sides accordingly. As a matter of fact, the axis of the mihrāb points as near as possible S.E. by E.; and therefore it would of course be nearer to the facts to call it E.; but the confusion it would introduce in following our authority through the history would be considerable, while real accuracy would not be obtained. The plans are therefore all marked according to Al-Makrizy's system, and all references to the points of the compass are to be understood in this sense. The *correct* orientation is also indicated outside Plan I.

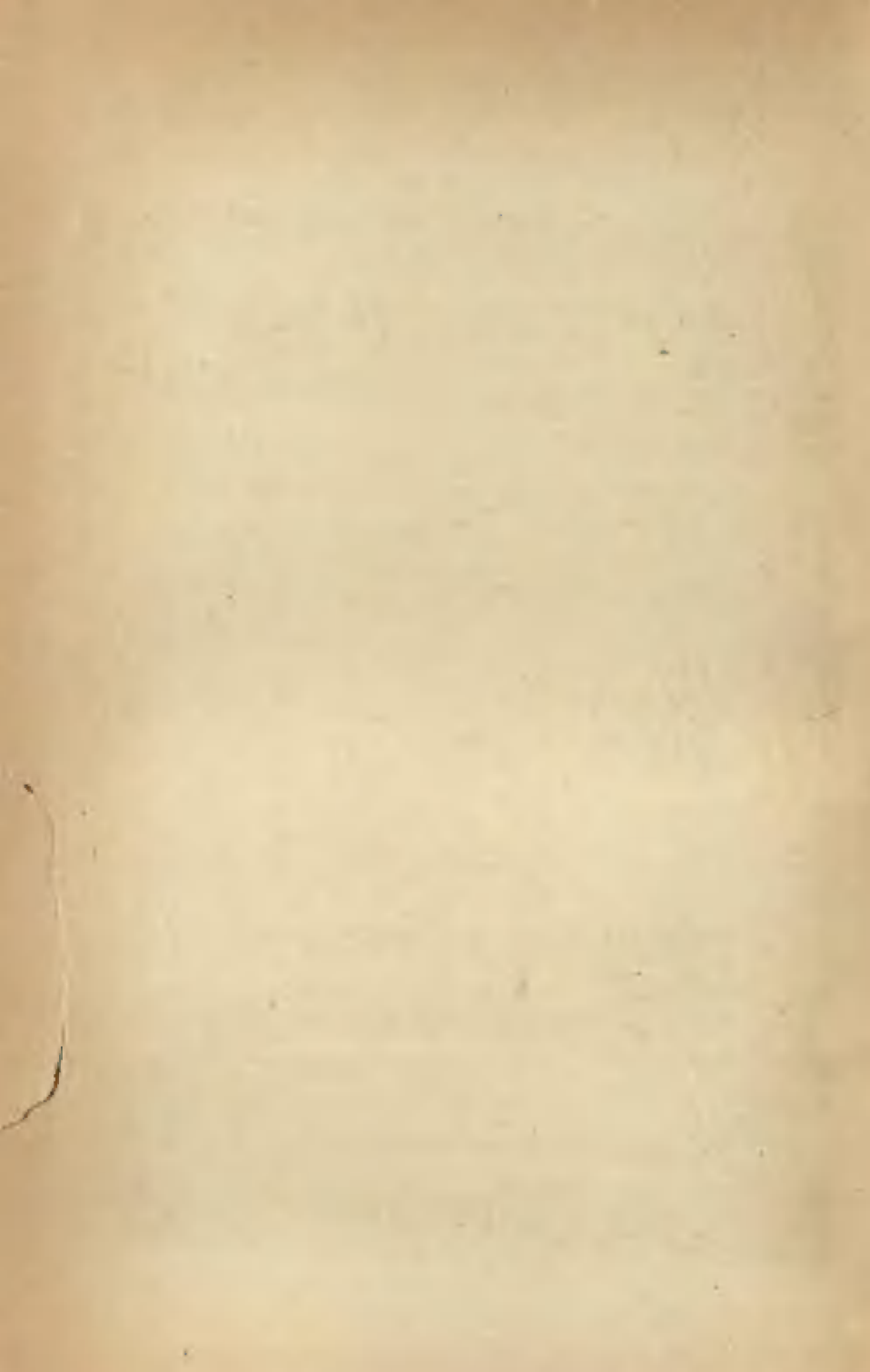
which he seeks (see Plan I.). Here let him ascend the mound which lies outside the huts by which the façade of the Mosque is shut in, and, facing towards them, take a general view of the scene. To his left he looks over a dusty space of comparatively low-lying ground, to the Aqueduct under which he passed twenty minutes ago; on his left front the citadel of Cairo stands out in the distance beyond a large expanse of high dust-mounds. Straight before him is the Mosque, but he can see little of it excepting the higher part of the two minarets, the mass of huts shutting out the view of the low walls; but behind the Mosque, at some two miles' distance, the limestone cliffs of Mukattam gleam in the sunshine: while further to the right the eye rests on a dusty height crowned by disused windmills. If he turns round, he will see on his right front the Coptic Monastery of Abu Seifein, with its domes and palm-trees; straight in front of him, after a few hundred yards of dusty plain, rise graceful groves of palms and other trees: while to the left front is an intricate mass of common houses, forming part of the village of Old Cairo, with a minaret or two peeping out from amongst them, and showing where the narrow streets contain a mosque.

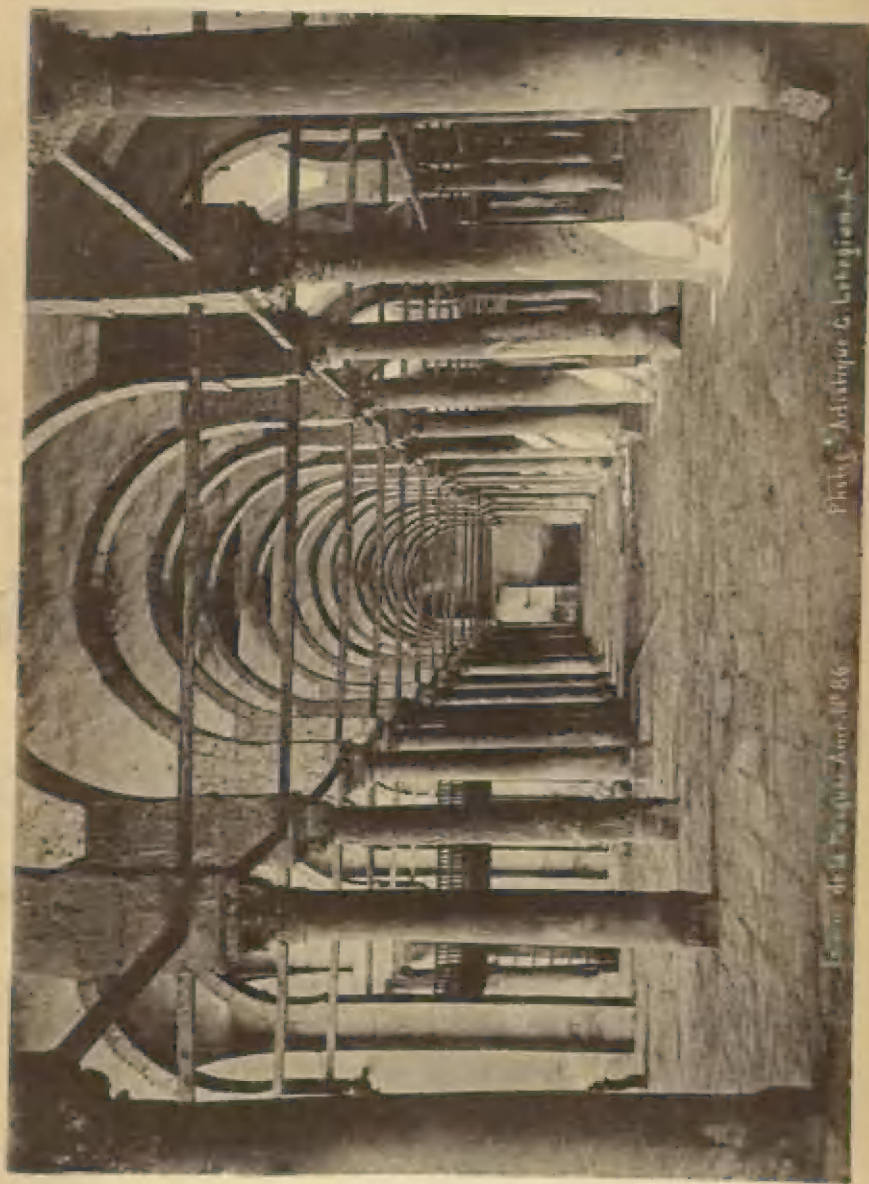
Descending from the mound, let us enter the cluster of huts by a door towards the right-hand corner of the Mosque, and pass through them, casting a glance on the way at the potters making earthenware bottles. We can now see part of the façade of the Mosque:—a low wall of baked brick, plastered and whitewashed: excessively irregular, not containing a single straight line: shored up at intervals by buttresses, and showing every sign of continual patching and restoration. Directly in front of us is the chief door of the Mosque, with a great buttress immediately to its right; above it is a small pointed arch to lighten the weight, and the whole is surmounted by an octagonal minaret rising from a square base and ending above its gallery in a cylindrical top with a conical cap. Going on towards the left, we come to a niche in the wall, with remains of stucco ornamentation (see illustration): and just beyond this another door, which,



MOSQUE OF AMR.

The Fountain in the Court.





From the S. W. corner, Aug. 10, 86.

Photo. Adair & Co. Leiden, N. H.

MOSQUE OF AMR.
In the S. colonnade.



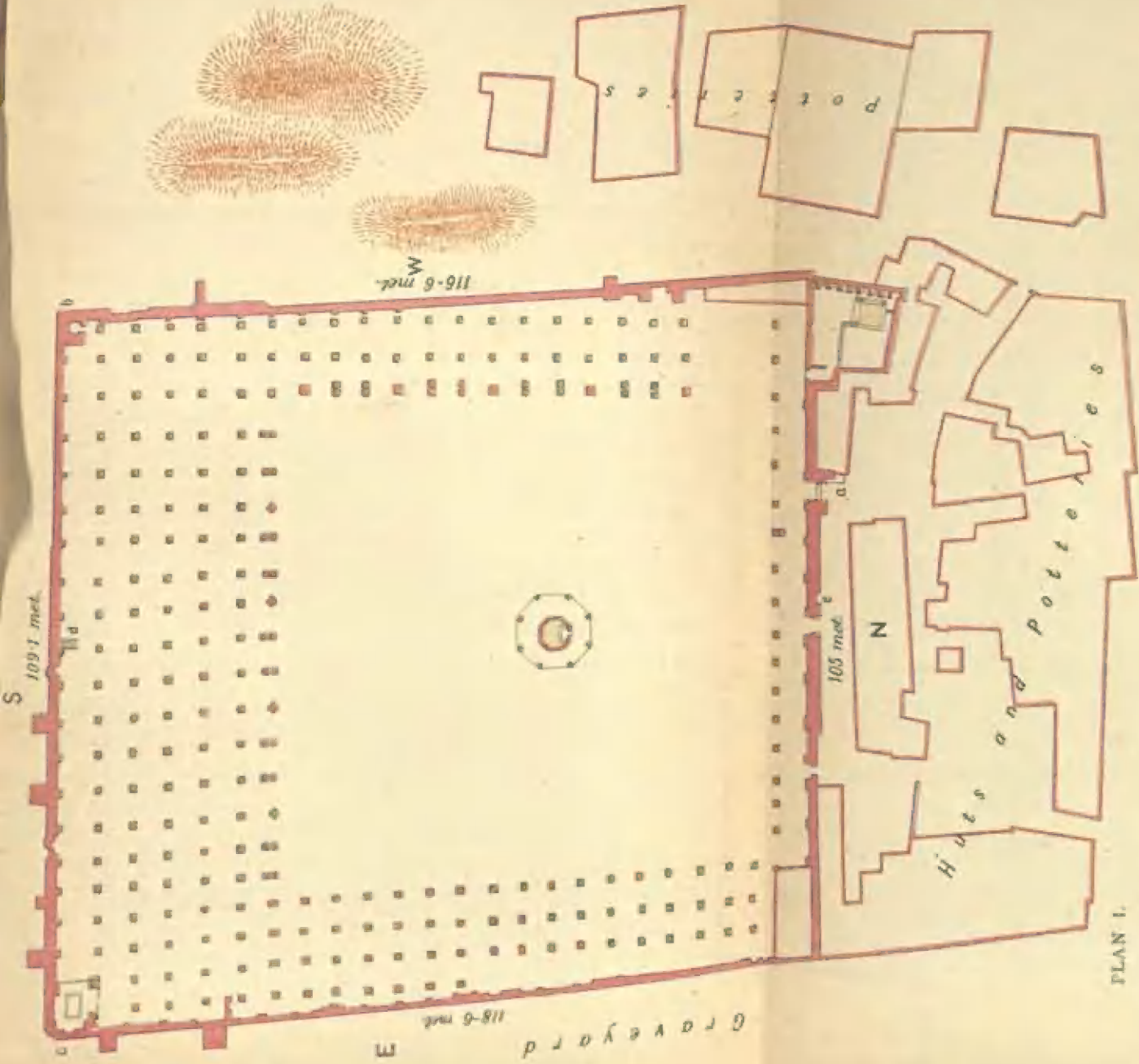


MOSQUE OF AMR:

The tomb called that of Abdallah, son of Amr.



*Remains of Stucco Mihrab on outside of N. wall—
probably of the time of Hārbarz.*

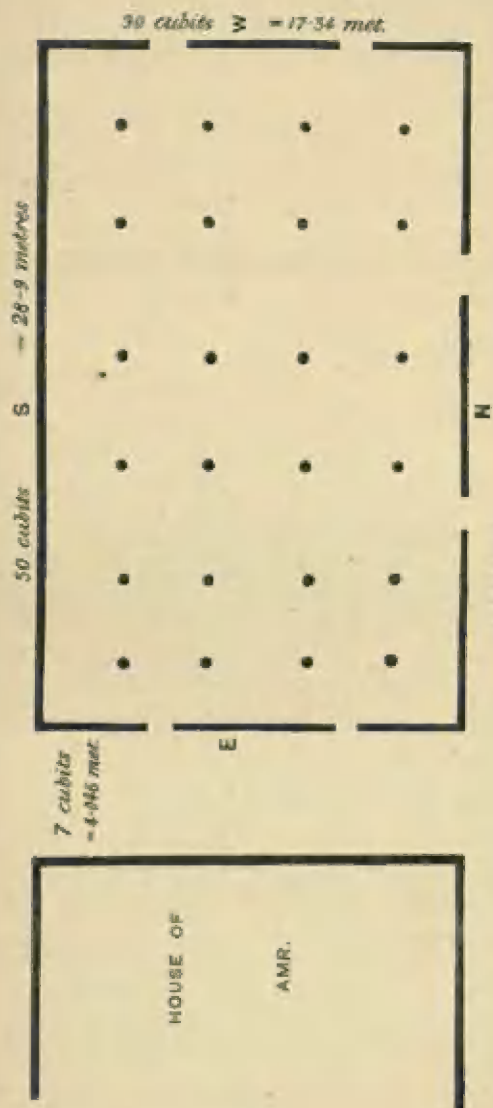


PLAN I.

THE MOSQUE OF AMR AT
THE PRESENT DAY.

Scale 1/4 in.

- a. Chief entrance, with minaret.
- b. Minaret.
- c. Sepulchral chamber.
- d. Minbar.
- e. Stucco mihrab in N. wall.

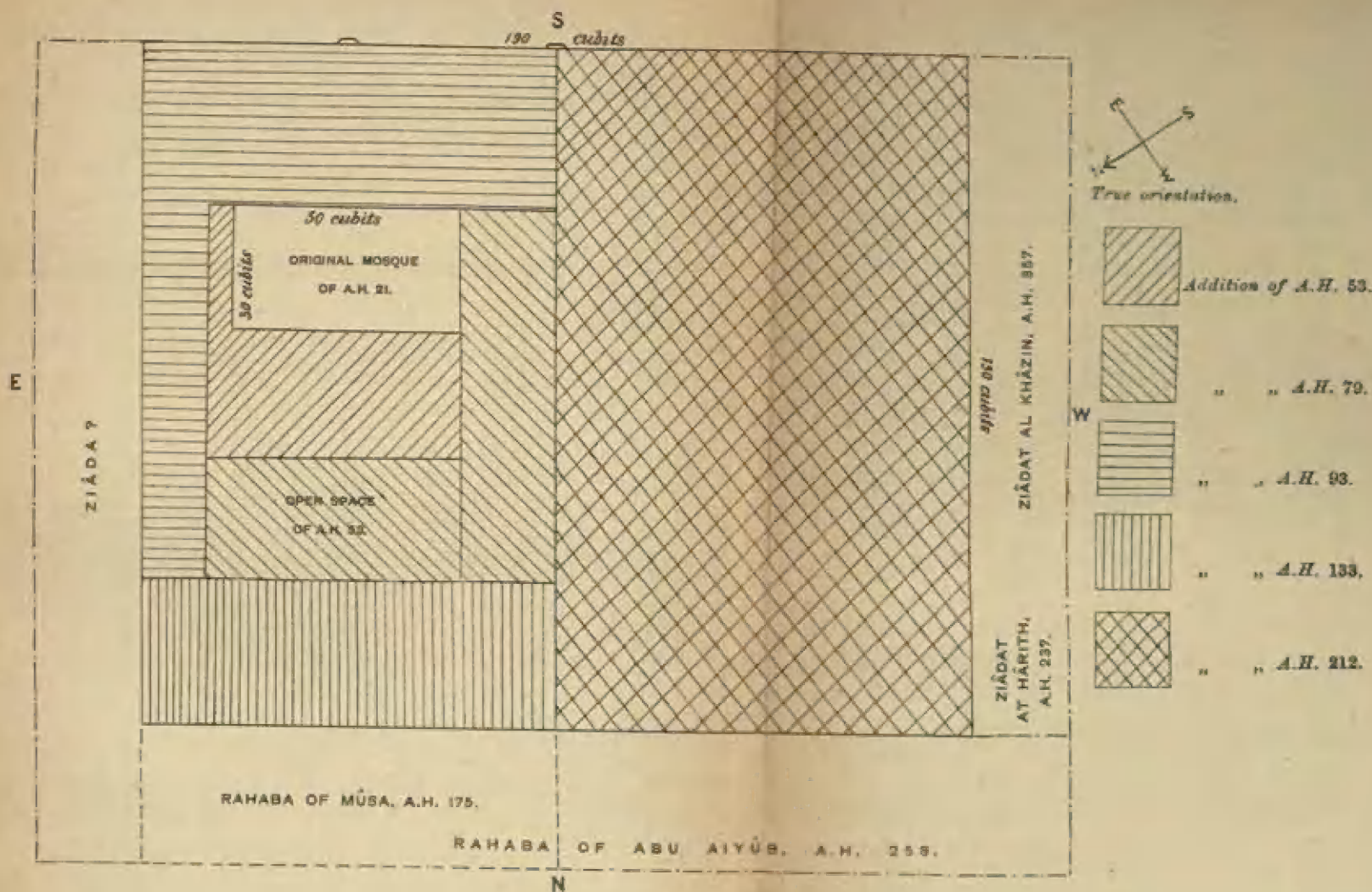


PLAN II.

Showing area and position of the original mosques of A.H. 21.

(The number and arrangement of the pillars is arbitrary).

Scale: 3 millim. = 1 metre.

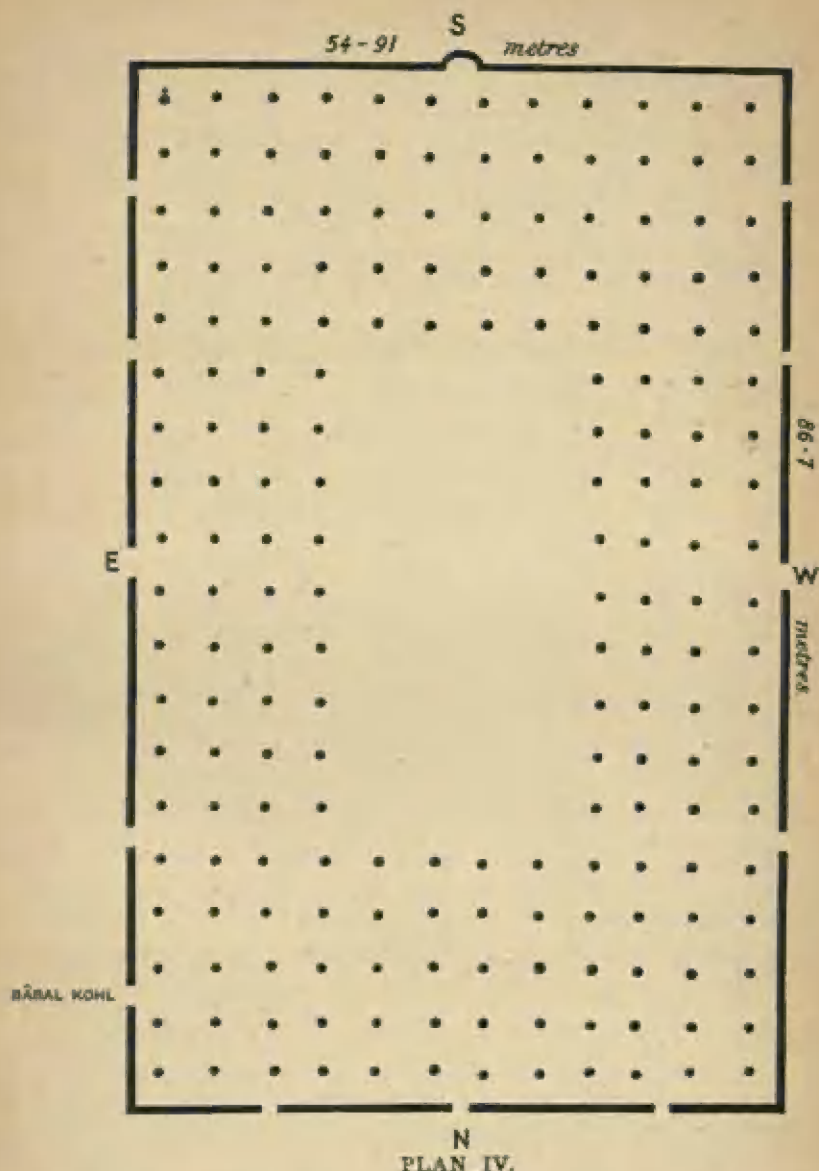


PLAN III.

Showing the growth of the area of the mosque from its foundation to A.H. 212: together with the outside court of Mûsa (-----), and the other outside courts, added after A.H. 212 (-----). The measurements of the sides do not include the outside courts.

Scale: 2 millimetres=3 cubits.

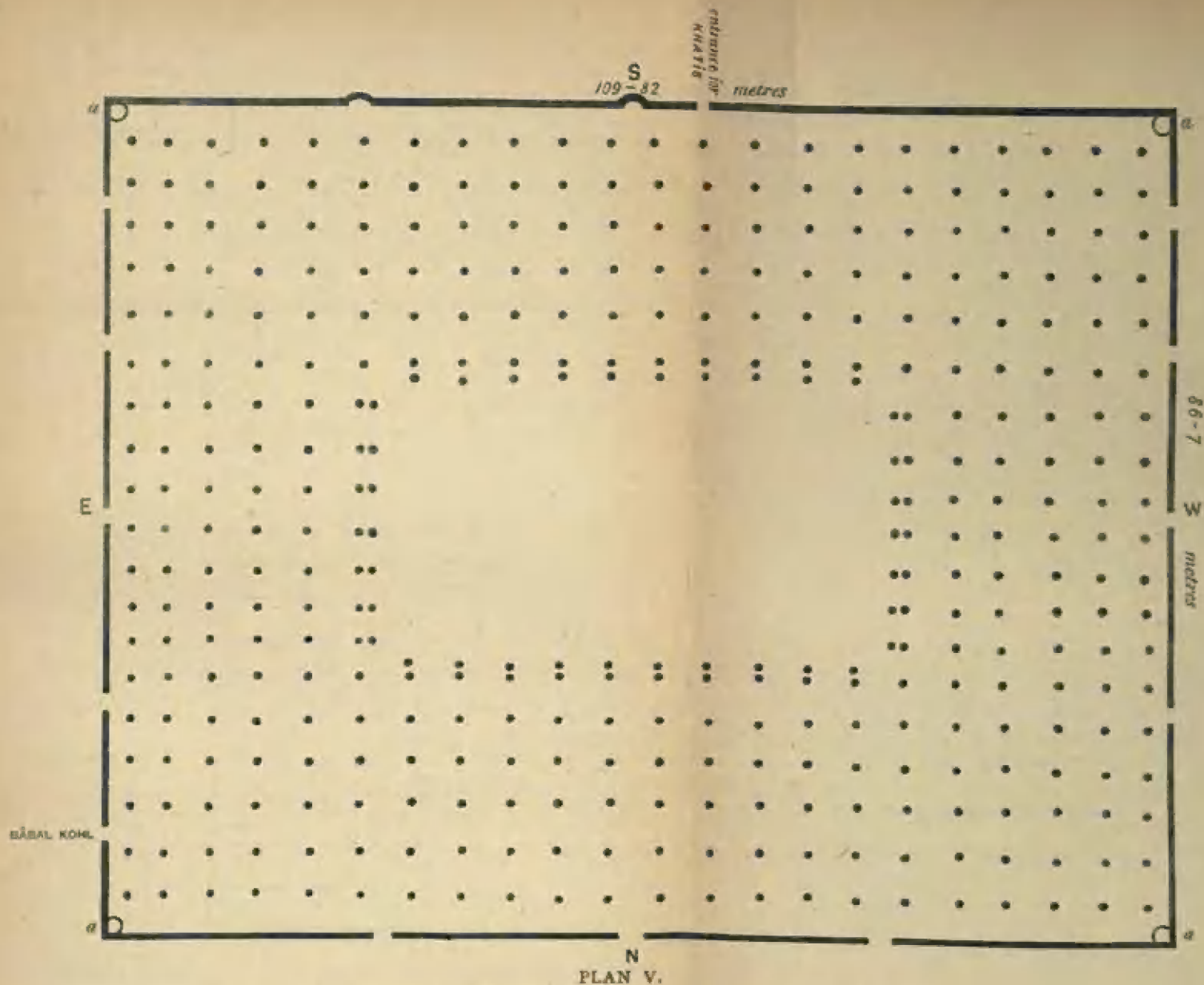




PLAN IV.

*Showing the area and probable arrangement of pillars of
the mosque in A.H. 133.*

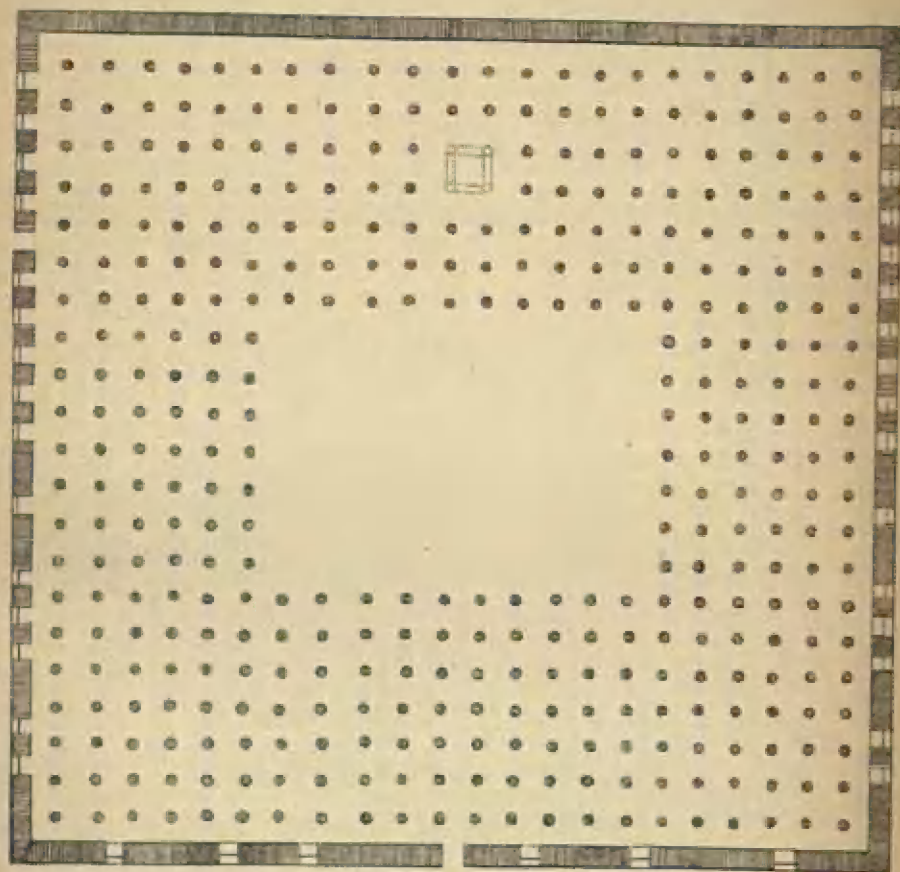
Scale: 3 millim.=2 metres.



Showing the area and general arrangement of the mosque, A.H. 212-785, according to Ibn al Mutawiq.

a a a. Probable position of 4 minarets: the fifth perhaps over centre N. gateway.

Scale: 3 millim. = 2 metres.



PLAN VI.

Pococke's plan, A.D. 1743 (= A.H. 1156).

however, is opened only on the last Friday in Ramadan, when all classes flock here to midday prayers. It will be unnecessary for our present purpose to make the whole outside circuit of the Mosque in equal detail: suffice it to say that the other three sides no longer show any traces of plaster or white-wash, and therefore the patching is still more visible. At the N. end of the W. side is a piece of wall considerably higher and thicker than the rest, with five small windows above, pent-house and round-arched alternately, and below them five large windows (blocked up), the arches trembling between round and pointed. So again on the S. side there are four different portions obviously of different dates: and when we get to the E. side (where the buildings attached to a graveyard sometimes come right up to the wall's), we remark that many repairs of a very late date have been roughly made with stone,—a material that does not enter the original scheme of the building. The whole effect of the exterior is that of walls for the most part originally ill built, and continually repaired piecemeal long after they had ceased to be worth preserving.

On entering the Mosque by the door under the minaret, we find ourselves under a wooden roof supported by a single row of columns. Before us lies a large open sandy, or rather dusty, court, at the farther end of which is a covered space, with its roof supported on six rows of marble columns. On the right and left we see many bases of columns, showing that the colonnades once ran round the whole court; in the midst of which stands the Hanafiya, or fountain of ablutions,—a little octagon building, whitewashed, with windows of wooden trellis-work. It is surrounded by a flat-topped verandah, supported on eight columns of white marble; and surmounted by a lantern of trellis-work with a little plaster dome. A tall palm and an old acacia stand near the Hanafiya: and fifteen slips of some other tree, presented to the Mosque in 1888, are symmetrically arranged in the court.

If we look at Plan I,¹ we shall remark two things

¹ This plan is reduced from one drawn by an official of the Wakfs in 1873, and liberally placed at my disposal by the said department. It may not be abso-

especially, with reference to the general scheme of the Mosque: first, that it is meant to be a rectangular figure, but is far from being so; second, that the actual arrangement of the rows of columns shows that it has once really been so. If we count the S. row of the S. colonnade, we find eleven columns to the left of the central niche, and only ten to the right: and a glance at the line of the W. wall, running closer to its row of columns as it comes S., suggests that the S. wall may have originally extended about another inter-columnar space to the right. In the same way we see that the E. wall has been so badly reconstructed as actually to cut short the row of columns¹ next to it, running N. and S. We can therefore have no doubt that the Mosque as it stands now represents a once really rectangular space, with 22 columns from E. to W., and with E. and W. colonnades *at least* four columns deep; and we shall be safe, too, in attributing to the N. colonnade, now represented by a single row of columns, a depth at least equal to this latter.

Let us now go into the S. colonnade and examine the columns, and we shall find that they are about 4·33 metres in height, from the ground to the wooden abacus from which the arches spring; but that the shafts are of different heights, and are equalized by bases and capitals of various heights and fashions: sometimes we even find an inverted capital serving as a base. The capitals are of late Roman and Byzantine character; the marble shafts of the columns have no polish, having suffered much in their time from alternate painting and scraping and rubbing down with sand. The arches which support the flat wooden roof differ among themselves, some being round, some pointed, and some distinctly horse-shoe in form; and the spacing of the columns not being very exact, some arches are necessarily

lately correct; but it is evident that considerable care has been spent upon it; and it is, in my own belief, the first and only plan of the Mosque that has even *approached* to correctness. Those of Coxe, and of the various guide-books, represent the Mosque as really a rectangular figure; and though sufficing to show the general scheme, are worse than worthless as a basis of investigation.

¹ Of all the columns in the E. and W. colonnades the *Anas* only remain; but that is sufficient for our purpose.

somewhat wider than others. To the right of the central niche is the pulpit: and at the N. end of the same inter-columnar space is the dikka,—a rough wooden platform raised on dwarf pillars. There is a second niche in the fifth space to the left of the middle one; and in the left-hand corner of the colonnade is a sepulchral chamber under a small dome, containing a tomb covered with wood roughly painted in dark red. In the opposite corner is a door leading to a minaret above. The whole colonnade is paved with limestone flags, worn and dusty; and the remains of a similar pavement can be traced in the E. and W. colonnades.

Such are the general features of the Mosque as we see it in the present day. Of architectural beauty there is really no trace, though the effect of the S. colonnade with its little forest of columns may suggest the grandeur of the building when the whole court was so surrounded, before the hand of ruin and decay was laid on the whole structure of the Mosque; when thousands of lamps hung from the wooden ties that run from arch to arch, and mosaic and gilding probably added richness and variety to the scene. It is only by an effort of the imagination that we can see any beauty in this sad wreck and skeleton of a building.

And yet there is a certain unique interest attaching to this neglected Mosque among the dust-heaps. It lies in the fact of its being the earliest foundation in Egypt, and among the earliest in the whole of Islām; in its connexion with the history of the first settlement of the Muslims in the land of the Pharaohs and the Ptolemies, and the long train of associations which are awakened by the story of its foundation, growth, and decay.

This story I here propose to trace, with the help chiefly of the Arab author Al-Makrīzy, whose celebrated book on the Topography and Antiquities of Egypt in general and Cairo in particular was written about A.D. 1420, and printed at Būlāk in 1853. Al-Makrīzy, after the manner of Arab writers, gives us a mass of historical material, chiefly in the form of direct quotation from his predecessors; but it is raw

material only, and the working up has yet to be done. If we wish to gain a really perspicuous view of the subject, the various details given us by the different authors quoted must be brought into relation with each other, and thus formed into an organized whole. To accomplish this as far as may be, will be the object of the present article. Careful comparison of all the materials at our disposal, whether historical notices, plans, or actual remains; the reproduction of historical material in the form of plans where it appears possible; the gleanings of illustrative passages which may bring before our eyes a picture of the place which the Mosque really held in the life of the people at various periods; lastly, the reproduction of photographic views of the present Mosque:—such are the methods by which we may hope in some degree to succeed in our object.

II.—THE ORIGINAL MOSQUE OF AMR.

When Amr ibn al Āsy invaded Egypt under the Caliphate of Omar, in the twentieth year of the Flight¹ (A.D. 641), the first opposition of really serious importance that he met with was from the Imperial garrison in the fort which still exists close by the Mosque which he afterwards founded. Tradition differs hopelessly as to the details of the siege, and the length of time which it occupied: what is certain, however, is, that whether after one month or seven, the garrison surrendered, and Amr was at liberty to turn his arms against Alexandria. The story runs that when the camp was breaking up for the expedition northward, it was found that a dove had built her nest in the tent of Amr, who, acknowledging the rights of hospitality, ordered that

¹ The date of the flight of the Prophet to Al-Medina, from which the Muslims date their era, corresponds to July 16, A.D. 622. Our authorities of course give their dates according to this era, which will be found much the most convenient for us to use in tracing the history, as each date will at once suggest the age of the Mosque, which is only twenty-one years younger than the era. I have therefore given the dates in years of the Flight (A.H.); but I have also in each case given the corresponding date A.D.

it should be left undisturbed: and thus it was that when, on his return from Alexandria, Amr proceeded to found his capital on the same spot, the new town was called El-Fustât, or "The Tent."

The scene which presented itself to one who stood on the top of the fortress was then very different from that which is seen by the traveller at the present day. The course of the Nile was much further eastward: it flowed directly on the west of the fortress, from the western gate of which one might step on board a boat, whereas at the present day there is a good quarter of a mile between the fortress and river. The whole site of the modern village of Old Cairo was thus at that time under water, and further north again the course of the river tended yet more to the east. Beyond the fortress, the only buildings in view were a few churches and monasteries,—one group far north, on the S.W. confines of modern Cairo: others scattered to the south. The great plain extending N. and E. of the fortress, now covered with mounds of debris and a succession of great graveyards, was at that time waste land with patches of cultivation, and, with the exceptions already mentioned, showed no signs of building whatever.

A little north of the fortress was a plot of ground planted with trees and vines. Here one of the warriors of Amr, by name Kaisaba ibn Kulthûm, had pitched his tent and established his followers at the time of the siege: and on returning after the capture of Alexandria he took up his old position, while Amr built himself a house a little to the East. Now at this time the Caliph sent orders to the governors of each of the newly-conquered provinces to build a Mosque for the Friday congregational prayer of the people, and among the rest Amr received a command to provide such a Mosque for the city that was to rise on the banks of the Nile. General opinion pointed to Kaisaba's house and garden as the best site: and when Amr appealed to him, and offered to give him whatever position he might prefer in its stead, Kaisaba of his own will gave up his ground "as a free gift to the Muslims"—a piece of generosity

celebrated in more than one copy of verses handed down to us. The Mosque was therefore founded on this site, A.H. 21 (A.D. 642). Luckily we have the testimony of an eye-witness as to its original dimensions, which were no more than 50 cubits by 30 cubits; or 28·9 metres by 17·34.¹ A road ran all round the outside, and there were six doors,—two opposite the house of Amr, *i.e.* East: two on the North, and two on the West; thus leaving closed the south side, that is, the side of the *kibla*, or direction of Mekka, to which the Muslim turns his face in prayer. The house of Amr extended N. and S. exactly the same distance as the Mosque, from which it was only 7 cubits (4·046 metres) distant (see Plan II.). The roof of the Mosque was very low, and there was no interior court.² The floor was not paved nor spread with mats, but simply strewn with small pebbles.³ It is related that no less a number than 80 of the "Companions" of the Prophet were present at the fixing of the *kibla*: and this fact gives a peculiar sanctity to these precincts in the eyes of pious Muslims to this day. One feature which is of great importance in all later Mosques was not present in its full development. This is the *Mihrāb*, or niche in the *kibla* wall, indicating the direction of Mekka,⁴ which is usually decorated with great elaboration of design and splendour of material. We are told distinctly that Amr placed "no hollow *Mihrāb*" in the Mosque, *i.e.* his *Mihrāb* was not a niche. It is plain, however, that there was something that

¹ The name of the cubit is in the Arabic *dhīrā-al-amal*. Now there are and have been many different cubits in use in Egypt; but no cubit of this name is now known, nor have I been able to discover any account of it. If, however, we look through the list of cubits now known, that called the *balady* or "native" cubit at once suggests itself as the most likely to be meant by *dhīrā-al-amal*, which expression would seem to mean "the cubit of ordinary use." Further, we shall see later, that if we accept this identification, the result is an almost absolute coincidence in the length of the *kibla* side of the Mosque of the present day, with the recorded length of that side after the last extension in that direction of which any account has come down to us. I therefore take the *dhīrā-al-amal* to be the same as the *dhīrā balady*, or 578 metres.

² Here ends the testimony of the eye-witness.

³ For we hear afterwards that Maalama first spread mats instead of the former pebbles, A.H. 53 (A.D. 673).

⁴ The *Mihrāb* itself is often vulgarly called *Kibla*, but not with strict correctness. *Kibla* simply means "direction towards," and technically the direction of Mekka taken by the Muslim in prayer.

took its place; for we learn in the later history that when the first niche was made, after the enlargement of the Mosque to the S., it was placed in a line with the old Mibrāb of Amr. This latter would no doubt be a roughly-painted upright space with a rounded top; and would of course serve the purpose just as well as a niche; for it merely points out which side of the Mosque is directed to Mekka, the orientation having already been made in the actual building. A *mimbar*, or pulpit, Amr did indeed set up; but the Caliph wrote and desired him to destroy it, saying: "Is it not enough for thee to stand up, while the Muslims sit at thy feet?"

Such, then, was the real Mosque of Amr: a simple oblong room, 28·9 metres by 17·34; the low roof no doubt supported by a few columns, which were easily stolen from the nearest villages, or from the ruins of Memphis, a few miles south on the other bank of the Nile; the walls probably of baked, but very possibly only unbaked bricks, and unplastered;¹ the floor pebble-strewn; the light probably supplied, as in the great colonnade at the present day, through square apertures in the roof. It possessed no minarets, or other attractive outside feature; no niche, nor any other internal decoration; the very pulpit was destroyed after a short time. Yet this was the germ of the mosque afterwards known as *Taj-al-Jawāmi*, or the Crown of Mosques. And indeed it is probable that its earliest days witnessed a greater amount of fervent worship and public spirit than could be easily found in the period of its greater architectural glory. For in the time of Amr we are still in the early days of Islām, when the original impulse of the faith had not yet lost its force, and the wealth of conquered provinces had not yet engendered luxury and ostentation. In these days the Mosque must have served in practice as a place of general assembly for other than solely religious purposes. The governor was himself the preacher, and the leader of the Friday prayers, and thus the weekly gathering on Friday

¹ For we learn further on that the walls were first plastered by Maslama, 32 years later.

would naturally lend itself to the announcement of public notices, and the discussion, formal or informal, of public business. Fortunately there has come down to us an actual report of a sermon preached by Amr, which brings clearly before us the part played by the Mosque in the life of those early days. As a genuine¹ discourse of a Companion of the Prophet, it has a great interest of its own; and we see in it how general moral instructions and administrative orders were combined in the sermon of a prince of the people in those still primitive times. Buhair, then, the son of Dhākir, related as follows:

"I and my father went to Friday prayers at midday, a few days after the Baptismal Festival² of the Christians. Now we were a long time making our prostrations; when lo, there approached men with whips in their hands, pushing back the people, so that they were afraid. So I said, 'O my father, who are these?' He replied, 'My son, these are the guard.' Then the Muezzins called to prayer, and Amr ibn al Āsy stood up on the mimbar: and I saw that he was a short thickset man, with a large head, and black eyes, and a good-humoured expression, clothed in embroidered garments, resplendent with an under robe and a turban and an upper robe. So he rendered praise and glory to

¹ There is no reason, so far as I can see, to doubt the essential authenticity of this discourse, which I translate from *Al-Makrīzī*, ii. 260. It is related by Ibn-Lahia, who was born A.H. 89; and the tradition is traced through two other persons, to the earlier of whom the first-hand witness, Buhair-ibn-Dhākir, related as in the text. For the better understanding of the sermon, it is necessary to remark that in the early days of Islām in Egypt no Muslims were allowed to settle in the country districts; they were confined by the Caliph's special order to Fustāt and Alexandria. In the spring, however, the great body of the arm-bearing population went to camp for three or four months in different parts of the country, for the purpose of putting out their horses to grass. The custom exists, in a necessarily modified form, to this day; and the technical term for it is the same that was used in Amr's time. Any native gentleman considers it necessary that his saddle-horses should spend at least three months in the clover-fields, say from the middle of January to May, and in some districts one may see at this season a large plain of clover dotted over with little huts made of maize-stalks, where the attendants of the horses sleep.

² I take the Arabic here to mean the Festival of the Baptism of Christ, known among the Copts as *Id al Ghātīs*, the "Festival of the Plunging." The expression actually used in this passage, and signifying "The Bathing of the Christians," seems to be unknown to anybody at the present day, but can hardly, I think, refer to anything else. As this festival falls in the middle of January, it just coincides with the period when the horses are put out to grass.

God in a few words, and called down blessings upon the Prophet (God bless and preserve him!) and preached to the people, giving commands and prohibitions. And I heard him urge them to give the legal alms, and to visit their kin, and command them to use moderation and avoid excess, and too great increase of their household, and all such luxury. And he said: 'O assembly of the people, beware of four faults; for they bring to trouble after ease, and poverty after plenty, and degradation after prosperity! Beware of increasing your households, and of luxury, and of wasting your substance, and of many words in an affair you cannot compass. 'Tis true, a man hath need of some leisure, to give rest to his body and see to its interests, and to allow his soul free scope for its desires. But whoso talketh this way, let him use moderation and content himself with a little: and let not a man in his leisure time let go his portion of knowledge;—so should he pass his life in neglect of good, and in ignorance of what God permitteth and what he prohibiteth. O assembly of the people! verily the constellation of the Twins hath arisen, and the Dogstar hath set, and the heavens have become clear, and the pest hath passed away from the earth, and the dew hath decreased, and the pasture hath come to maturity, and the pregnant ewes have brought forth, and the shepherd must keep a fair watch over his fair flocks. Go forth, then, with the blessing of God most high, to your fields: enjoy all the blessings they afford,—the milk, the sheep, the chase: put your horses to grass and let them grow fat, and guard them well, and treat them with all honour: for they are your defence from your foes, and on them depends your booty and your spoil. And treat with kindness the Copts who are your neighbours: and beware of the strange women whose bodies are straight as the lance: for verily they corrupt the faith and destroy the energies. I was told by the Commander of the Faithful, Omar, that he heard the Prophet (God bless and preserve him!) say: *Verily after my time shall God lay open Egypt before ye. Treat ye, therefore, its Copts with kindness: for they are your kin and your*

subjects. Therefore, I say, keep off your hands, and restrain your passions, and veil your glances. And let me not know of a man who returneth having fattened his own body and let his horse grow lean. Know that I shall pass the horses in review, even as the men: and whoso hath let his horse grow lean, without a sufficient excuse, his pay shall I reduce in proportion. And know that ye are encamped on the enemy's borders, until the day of judgment; so many are the foes that surround you, and so fixed are their hearts upon you and your lands, that source of increase and wealth and plenteous possessions and blessing which decreaseth not. I have been told by Omar, Commander of the Faithful, that he heard the Prophet (God bless and preserve him!) say: *When God shall open before you the land of Egypt, make ye there a numerous host: for that host is the best of the hosts of the earth.* Then said Abu Bakr (God accept him!), *Why so, O Prophet of God?* He replied, *Because they and their wives are in camp on the enemy's borders until the day of judgment.* Therefore, O Assembly of the people, praise God for what he hath given you, and enjoy in your fields that which your souls desire: and when the branch is dry, and the water is warm, and the flies increase, and the milk is sour, and the herb is parched, and the rose falleth from the tree:—then arise, return to your city, with the blessing of God: and let no one of you who hath a family return without bringing some present to his family, in proportion as his wealth or poverty permits him. I have said my say: and I commit you to the protection of God."

III.—HISTORY OF THE MOSQUE IN DETAIL.

The history of the Mosque in which Amr preached the above sermon may be conveniently divided into three periods. The *first*, or the period of *growth*, extends from the foundation of the Mosque to the addition made by Ibn Tāhīr in A.H. 212 (A.D. 827). During this period the Mosque underwent continual enlargements in area, as the population

of the city kept increasing (see Plan III.). The *second* period extends from A.H. 212 to the burning of Fustāt by Shāwar in A.H. 564 (A.D. 1168), or perhaps better to the restoration of the Mosque by Saladin in A.H. 568 (A.D. 1172-3); and may be called the period of *elaboration and decoration*. In this period no further extension takes place in the area of the Mosque proper; but we hear from time to time of repairs, decorations, and such-like. With the dynasty of Saladin begins the *third* period, containing the long and monotonous history of the neglect and decay of the Mosque. We hear, indeed, of many restorations: but in each case they were undertaken when the Mosque actually threatened to fall: and it is also to be remarked that nearly all of them were owing to the exertions of individuals, who either used their influence to move an insouciant government, or, failing that, drew upon their own purses. Such are the three periods, each of which we will now proceed to consider in detail.

(a)—*Period of Growth*, A.H. 21—212 (A.D. 642—827).

The first addition to the original Mosque was made in A.H. 53 (A.D. 673), thirty-two years after its foundation, by the governor Maslama. The people complained that the Mosque had become too small: and by the order of the Caliph Muāwiya the governor enlarged it on the east, towards the house of Amr, and on the north, adding also an open space or court outside the Mosque in the latter direction (see Plan III.). We are not told the dimensions of the Mosque as thus reconstructed: but it is plain that the enlargement to the east can have been only very small, as Amr's house was at a distance of but four metres and a fraction. Maslama was the first to plaster the walls, and decorate them to some extent, though in what manner we are not told,—probably by raised stucco-work. He also spread matting on the floor, in place of the pebbles which were formerly strewn there. Lastly, by order of the Caliph,

he built four places for the call to prayer, one at each corner of the Mosque. It is difficult to say what the exact form of these may have been: the name given them by our authority is neither of the words ordinarily in use for "minaret": in all likelihood they were but something like sentry boxes, perched on the roof at each corner; the germ of the future graceful sky-pointing minaret. They were approached by a staircase from the outside of the Mosque.

This building seems to have sufficed for the wants of the Muslims for another 26 years, after which time, in A.H. 79 (A.D. 698-9), the governor Abd al Azīz ibn Marwān, brother of the reigning Caliph, entirely rebuilt¹ the Mosque, increasing its size to the West, and bringing within its walls the open space which Maslama had attached to it on the North (see Plan III.), while on the East "he found no space to enlarge it upon," which we know must have been the case, since the Mosque as enlarged by Maslama must have all but joined the house of Amr. Ten years later the roof, which was still very low, was raised by the governor Abdallah ibn Abd al Malik.

Only fourteen years after the enlargement by Abd al Azīz, the whole Mosque was again rebuilt and enlarged by Kurra ibn Sharik. The work was commenced at the beginning of A.H. 92 (October, A.D. 710), and was finished in the ninth month of A.H. 93. During this time the Friday prayer was held in a *Kaisariya*, or sort of market. The additions of Kurra were made to the South and East (see Plan III.). On the latter side he took into the Mosque part of the site of the house of Amr, whose heirs received compensation. The addition to the South was the first that had taken place in that direction: and in connexion with this it is to be remarked that Kurra now first made a *Mihrab* in the form of a niche, to mark the direction of the Kibla. This, we are told, was the niche afterwards (falsely) known as that of

¹ Our authority says definitely that Abd al Azīz *knocked down* the existing mosque. This is sufficient to dispose once for all of any attempt to discover even a fragment of the original building in the present Mosque. We shall see later that there can really be but little of the Mosque which has not been rebuilt many times.

Amr; and it was in the same line as the original Mihrāb (not a niche) of Amr. To mark the original position of this latter, Kurra gilded the capitals of four pillars which enclosed the spot. The Mosque of Kurra had four doors to the East, four to the West, and three to the North. Of these, the eastern ones are said to have been the same which existed in the time of Al Makrīzy (say A.D. 1420). The mosque has indeed now arrived at its greatest extension to the South and to the East: and though the present walls may be later in date, their lines represent roughly those of Kurra's time; and the position of Kurra's mihrāb is no doubt indicated with more or less exactness by the left-hand mihrāb of the present day. Kurra also erected a new mimbar, which remained till the time of the second Fātimy Caliph (A.H. 365-386: A.D. 975-996).¹

About the same time (A.H. 97, A.D. 715-6), was built inside the mosque a chamber for the Beit al Māl, or public treasury. We have no information as to its exact form or position: but we know that it comprised a dome, under which the second Fātimy Caliph, al Aziz, had a fountain placed, nearly 200 years later. Two suggestions occur as to its possible position: first that it was in the left-hand corner of the S. colonnade, where is now the domed chamber with the so-called tomb of Abdallah the son of Amr: second, that it was built in the middle of the Court, like the present Hanafiya. This latter supposition is, however, excluded by what we are told later: for in A.H. 442 (A.D. 1050-1), when the chamber of the Muezzins on the roof of the Mosque was restored and improved, a trap-door was made near it, leading

¹ It is doubtful whether Amr had set up another mimbar after the death of the Caliph Omar: it is certain, however, that one already existed in the Mosque at the time of Kurra's additions. According to one account it dated from the time of Abd al Aziz ibn Marwān (A.H. 65-86; A.D. 685-705), and came from a Christian church: according to another, it was sent to the governor Abdallah ibn Sad, the immediate successor of Amr in the governorship of Egypt, A.H. 24-35 (A.D. 645-656), by the King of Nubia, who sent his carpenter, by name Buktar, a native of Dendera, to put it up. Now Buktar is a Coptic name, and the traditions are worth mentioning because they both point to the Coptic origin of the first pulpits in Egypt, and tend to support the theory which refers to Coptic influence that peculiar style of minute and beautiful panelling in wood and ivory, so characteristic of Muslim pulpits.

down into the Beit al Māl. This proves that the latter was under one of the colonnades, and the probability is that it was somewhere under the great southern one. We are told of two occasions when this treasury was robbed.

In A.H. 133 (A.D. 750-1), after the extinction of the Ummeyyad line of Caliphs, Sālīh ibn Aly, Governor of Egypt under the first Abbāsy, added to the Mosque to the extent of four lines of columns to the North: making a fifth gate to the East, known in the time of Al Makrizy as Bāb al Kohl. Of the Mosque at this time Plan IV. attempts a representation. Its measures we know from what we are told of its dimensions when doubled in size in A.H. 212 (see below). The number and arrangement of the columns is *approximately* given us by the facts. For we know that Sālīh added four rows of columns to the North: therefore the least we can allow to the N. colonnade as reconstituted by him will be six rows. According to the arrangement given in the plan, we see that before the addition of Sālīh the south colonnade would have six rows, while the North had two: and this is a very probable arrangement; for the kibra side, which is in a special sense the place of prayer, has generally a greater depth of covered space than the others, and would in the earlier stages of a Mosque thus built by accretion receive the first attention. The spacing of the columns is practically given by the measures of the sides, and also by the reconstruction of the Mosque of A.H. 212 (see below). For the rest, the arrangement of the columns is not dogmatically given as correct in detail, but as a conjectural restoration, founded on the general facts as we know them.

In A.H. 175 (A.D. 791-2), Mūsa ibn Aly added a *rahaba*, or open court, again to the North. By this we are to understand a sort of large vestibule or corridor, open to the sky, outside the north wall, which latter remained in its original position. This *rahaba* is not to be reckoned as part of the Mosque in the strictest sense of the word. Finally, in A.H. 212 (A.D. 827) Abdallah ibn Tāhir ordered the Mosque to be doubled in size, by the addition to the West of its exact area in the same shape: and we are told, "the addition of

Ibn Tāhir was the great Mihrāb and all that is to the West of it, up to the *Ziādat al Khāzin* ;"—of which latter more hereafter. The dimensions of the Mosque were now 190 cubits by 150 : and the period of growth is closed. If we look forward 500 years, we shall find that the area is essentially the same. Al-Makrizy has in another passage preserved to us certain square measurements given by Ibn al Mutaawag, a writer who died about A.H. 730 (A.D. 1329-30). These, representing the Mosque of that day, are as follows :

Area of the whole Mosque, 42,000 sq. *dhirās al bazz* : of which the details run thus :—

S. and N. colonnades, each	13,425	=	26,850
E. and W. „ „	3,825	=	7,650
Sahn, or open court in the middle			7,500
			<hr/> 42,000

Luckily, Ibn al Mutaawag informs us that these 42,000 sq. *dhirās al bazz* = 28,000 sq. *dhirās al amal* : i.e. 3 sq. *bazz* = 2 sq. *amal*. Multiplying the sq. *bazz* areas by $\frac{2}{3}$, we get then in terms of sq. *amal* as follows :

S. and N. colonnades, each	8,950	=	17,900
E. and W. „ „	2,550	=	5,100
Sahn 			5,000
			<hr/> 28,000
Total area in sq. <i>amal</i> ¹ ...			28,000

Now the total area resulting from the *linear* measurements given above, of the Mosque as it stood in A.H. 212, after the addition of Ibn Tāhir (190 × 150 cubits), is 28,500. The difference between this and the 28,000 of A.H. 730, just arrived at, is so small that we may safely disregard it, and declare that, roughly speaking, the area of the Mosque in A.H. 212 and in A.H. 730 was 28,500 sq. cubits. This being the case, we shall also naturally infer, in the

¹ The *dhirās al amal* (for which see note *supra*) we will now for convenience call a *cubit* simply.

absence of any evidence to the contrary, that the general arrangements of colonnades and sahn was also essentially the same during this period of 500 years. By fitting, therefore, the areas obtained from Ibn al Mutaawag, to the linear measurements of A.H. 212, we shall arrive with almost absolute accuracy at the plan of the Mosque from A.H. 212 to A.H. 730 (A.D. 827-1329).¹ We are thus enabled to draw a plan of an area of 190×150 cubits, with S. and N. colonnades each $47\frac{3}{4}$ cubits deep: while the E. and W. colonnades are each $55\frac{1}{2}$ cubits from N. to S. by $45\frac{1}{4}$ cubits from E. to W.: leaving in the middle a sahn or open court of 5500 square cubits. Turning these measurements into metres, we have an area of 109.82×86.7 metres: and (neglecting fractions) the depth of the S. and W. colonnades is 27 metres; while the E. and W. colonnades are 32 metres from N. to S., by 26 metres from E. to W. (see Plan V.). The next question is the number and distribution of the columns. The number is given by Ibn al Mutaawag as 378. Now since the plan of the Mosque at the present day (Plan I.) obviously points to an original line of 22 columns along the N. and S. sides, and the length of those sides in the Mosque of Ibn Tāhir just gives us room to put in the extra column, which is now missing, we are quite

¹ The calculations are in detail as follows:

S. and N. Colonnades: each

Length 190 cubits.

Area 8950 sq. cubits.

$$\therefore \text{Depth} = \frac{8950}{190} = 47\frac{3}{4} \text{ cubits.}$$

E. and W. Colonnades.

The length of the E. and W. sides of the Mosque is 150 cubits. From this we must subtract $(47\frac{3}{4} \times 2)$ cubits, the depth of the S. and N. colonnades, to arrive at the

$$\text{Length } 150 - 94\frac{3}{4} \text{ cubits} = 55\frac{1}{2} \text{ cubits.}$$

$$\text{Area} = 2550 \text{ sq. cubits.}$$

$$\therefore \text{Breadth} = 2550 \div 55\frac{1}{2} \text{ cubits} = 45\frac{1}{4} \text{ cubits.}$$

The Sahn, or court in the middle.

The length and breadth is given by the above:

From N. to S. it is the same as the E. and W. colonnades, viz. $55\frac{1}{2}$ cubits.

From E. to W. it is $190 - (45\frac{1}{4} \times 2) = 190 - 91\frac{1}{2} = 98\frac{1}{2}$ cubits.

The area of the sahn is therefore $55\frac{1}{2} \times 98\frac{1}{2}$, which works out correctly to 5500 sq. cubits.

safe in ranging our columns in the N. & S. colonnades in lines of 22. The problem of arranging the whole number on this basis would be solved if we could make the N. and S. colonnades each seven columns deep ($7 \times 22 \times 2 = 308$), and the E. and W. colonnades each seven columns from N. to S. by five from E. to W. ($7 \times 5 \times 2 = 70$: total 378). This arrangement is exactly represented in Pocock's plan (Plan VI.), if we take away one row E. and W. from the E. and W. colonnades. Such an arrangement, however, would do violence to the spacing of the columns in our present plan: since we should then have as many as 21 columns in the whole line from N. to S. (86·7 metres) against 22 only from E. to W. (109·82 metres). The spacing problem solves itself fairly if we place the columns as in Plan V., giving 19 columns to the whole line from N. to S. We then get N. and S. colonnades each 22 (E. and W.) \times 6 (N. and S.): E. and W. colonnades, each 7 (N. and S.) \times 6 (E. and W.) This gives a total of 348 columns only: leaving 30 columns to be accounted for. These it seems natural to put with the columns bounding the Sahn, as we see them at the W. end of the S. colonnade at the present day. We should, however, require at least 34, instead of 30, so that we must acknowledge that the exact arrangement of the columns remains an unsolved problem; though the areas and arrangement of the colonnades and court are certain.¹ The doors, according to Ibn al Mutaawag were 13:1 on the South, for the Khatib or preacher, only; an arrangement known in various mosques: three on the North: five on the East: and four on the West. The minarets were five: we may suppose one at each corner, and one extra one somewhere else,—probably in the centre of the N. side. All these details are represented in Plan V.:

¹ That is, always supposing that Ibn al Mutaawag's details are to be relied upon. The fact that the number of columns is really too great to get into the area of his colonnades, together with the coincidence with Pocock's plan just mentioned, inclines one to suspect that the area is too small, and that the Mosque had already, when it contained 378 columns, received the extension N. which we find in Pocock's plan. We shall see later on that there is a further and more important reason for this suspicion.

which (neglecting for the moment the "Ziādas," which are sufficiently represented in Plan III.), we may assert, with a reservation as to a possible extension northwards, to represent the area and general arrangement of the Mosque as it was in essentials from A.H. 212 to A.H. 730.

But the course of the history has here led us too far forward, and we must now return and see what happened after the addition of Ibn Tāhir.

(b)—*Period of Elaboration and Decoration*, A.H. 212—568
(A.D. 827—1172).

We chose the date of A.H. 212 as closing the period during which the Mosque underwent continual enlargement by a long succession of governors. From this date down to the burning of Al-Fustāt by the Wazīr Shāwar, in A.H. 564 (A.D. 1168-9), the fortunes of the Mosque were somewhat varied, and it received more or less attention according to the immediate circumstances of the time: but as contrasted with the preceding period of growth on the one hand, and the succeeding period of neglect on the other, it may fairly be named a period of elaboration and decoration. There are indeed sufficient historical reasons for the ceasing at about this time of the previous continual extensions of the Mosque. Already in A.H. 133 (A.D. 750-1), on the fall of the Ummeyyad dynasty, a military suburb had been formed to the N.E. of Al-Fustāt; and in A.H. 169 (A.D. 785-6) a mosque was built there for Friday prayer. Again, in A.H. 258 (A.D. 872) Ahmad Ibn Tūlūn, governor of Egypt, who made himself practically independent of the Caliphate, and founded a dynasty in Egypt, built a town again further N.E., where in A.H. 263 (A.D. 876) he founded his celebrated Mosque, which still exists. Once more, within the period which we are considering falls the foundation of the city of Cairo proper (A.H. 358, A.D. 969), with its great mosques Al-Azhar and Al-Anwar (the latter better known as the Mosque of Al-Hākim). Accordingly we find that such additions as were

made to the Mosque of Amr during this period did not increase the area of the Mosque proper, but were of the nature of outside courts (see the dotted lines in Plan III.). Such courts are technically known as *ziādas*, or additions: and in Ibn al Mutaawag's account of the Mosque of his day we are told that it had three *ziādas*.¹ Let us briefly trace their history before passing on to the other details of this period.

We have already seen that the Mosque as it existed in A.H. 133 (Plan IV.) received in A.H. 175 (A.D. 791-2) an outside addition to the north, known as the "Rahaba of Mūsa." Al-Makrizy's account of the other *Ziādas* is a little obscure. He tells us, however, that the Kādī Al-Hārith built in A.H. 237 (A.D. 851-2) the *Ziāda* known by his name, and that it formed in later times the northern part of the addition known as *Ziādat-al-Khāzin*, built by Abu Bakr-al-Khāzin in A.H. 357 (A.D. 968). This latter addition we have already incidentally heard of, as being to the west of Ibn Tūhir's enlargement of the Mosque. Meanwhile, in A.H. 258 (A.D. 872) was built on the N. side the addition known as *Rahabat Abi Aiyūb*, which name was in Al Makrizy's time extended to the original *Rahaba* of Mūsa, which formed its eastern half. (This Abu Aiyūb also set up in the *Sahn* a number of wooden pillars, which supported an awning to protect worshippers from the sun. These remained till A.H. 406 (A.D. 1015), when they were removed by the Fātimy Caliph Al-Hākim.) We have thus the whole W. and N. sides surrounded by open courts. There remains only the E. side, as to which we have no definite information. Since, however, there were three *Ziādas* in Ibn al Mutaawag's time, we cannot doubt that this side also had at some period received an outside court, thus completing the natural plan, which was adopted in the case of the Mosque of Ibn Tūlūn.² We may remark that of these three

¹ The Mosque of Ibn Tūlūn has three *ziādas*, just as represented in our Plan III.: and a street which runs outside one of them is known to this day as *Sikkat az-Ziāda*, or *Ziāda Street*.

² The existence of the eastern *Ziāda* in later times is proved by the fact that we are told that at some unspecified date after A.H. 702 (A.D. 1302), the northern and eastern *Ziādas* fell down.

Ziādas, those on the E. and W. would seem to have disappeared in later times, since the length of the sides of the Mosque from E. to W. is still the same as in the time of Ibn al Mutaуwag: whereas the original northern one, or part of it, has been absorbed into the body of the Mosque.

Such, then, is the history of the Ziādas. We now proceed to the other incidents of our second period. Of these the first to be noticed is a fire which occurred in the Mosque in A.H. 273 (A.D. 886), and destroyed a large part of the addition of Ibn Tāhir. The damage was restored by Khumārawaih, the son and successor of Ahmad ibn Tūlūn, at an expense of 6400 dīnārs—say £3200.

It was under al-Ikshīd, in A.H. 324 (A.D. 936), that the majority of the columns were decorated (no doubt by painting the shafts and gilding the capitals), and in particular had collars placed round the junction of shaft and capital. These would be of some metal, probably brass, and perhaps studded with pieces of enamel or coloured glass.

In A.H. 336 (A.D. 947-8) Abu Hīf the Kādī built a chamber on the roof for the Muezzins.

The year A.H. 378 (A.D. 988-9) saw the placing of the fountain under the dome of the Beit al Māl, as already mentioned.

In A.H. 387 (A.D. 997) the Mosque was replastered or whitewashed. We are told that much mosaic decoration was removed on this occasion: and thus learn incidentally that such decoration had existed. We may safely suppose that it dated either from the time of the dynasty of Ibn Tūlūn, or from that of the Ikshīdīya; for both of these dynasties cultivated the arts of magnificence.

The Fātimy Caliph Al-Hākīm sent to the Mosque in A.H. 403 (A.D. 1012-3) no fewer than 4200 copies of the whole or of parts of the Korān, some of them written in letters of gold: and the people were free to use them in the Mosque. At the same time he had made specially for the purpose a great chandelier, containing 100,000 dirhams of silver. Its bulk was so great that it could not be got into the Mosque without enlarging a door for the purpose.

Three years later (A.H. 406, A.D. 1015-6), the same Caliph did away with the awnings in the Sahn.

One other decoration made in the time of the Fātimy Caliphs remains to be mentioned. This is the hanging of a silver chain in front of the Mihrāb, by the Caliph Al Mustansir in A.H. 438 (A.D. 1046-7). At the same time the pillars of the Mihrāb were enriched with silver collars, which were afterwards removed by Saladin.

From this time down to the burning of Al-Fustāt, we hear of sundry slight additions in detail and various repairs, but of nothing worth mentioning here. In the year 564 A.H. (A.D. 1168-9) Amaury, King of Jerusalem, invaded Egypt, and encamped to the south of Al-Fustāt: and by order of Shāwar, the Wazir of the last Fātimy Caliph Al Ādid, fire was set to the town, to prevent its falling into the hands of the Frankish army. In this fire the Mosque of course was involved,—and we are told that it suffered damage. It would, however, be quite a mistake to suppose that the actual structure was destroyed. The walls, though no doubt in need of much repair, remained standing: the roof and all other woodwork would of course be utterly destroyed, and many other details of all sorts would require restoration. This was accomplished four years later (A.H. 568=A.D. 1172-3) by Saladin, who, having taken over the government of the country, “restored the old Mosque in Misr, and renewed the kibla side of the Mosque,¹ and the great mihrāb, and paved it with marble, and inscribed his name upon it.” Beyond this he made many small alterations in detail, none of them worth noting here. With this date our second period may be said to come to an end: and we therefore pass on to the third and last.

(c)—*Period of Neglect and Decay*, A.H. 568 . . . (A.D. 1172-3).

That the period of neglect and decay had now set in is

¹ This does not necessarily imply the rebuilding of the S. wall. It would seem that the entire renewal of the S. colonnade is all that is meant: though the wall would of course undergo repairs.

sufficiently proved by the fact that no further restoration took place during the whole of the Aiyūby dynasty (A.H. 568-648=A.D. 1172-1250-1). "The mosque remained in this state," we are told, "till the days of Izz-ad-dīn Aibak, the first Mamlūk sovereign." Meanwhile, we may quote the evidence of an intelligent traveller, and most picturesque and graphic narrator, who visited the Mosque during the reign of As-Sālih Nigm-ad-dīn, practically the last Sultan of Saladin's dynasty (A.H. 637-647=A.D. 1240-1249).¹ After telling us how he rode on donkey back to visit Al-Fustāt, and describing all the humours of the journey, he proceeds as follows:

"So I went on, and walked in the narrow markets, where my sufferings from the crush of the people with their wares, and waterskins carried on camels, were such as can only be done justice to by witnessing and undergoing them; until at last I arrived at the Mosque. And I observed in the matter of the narrowness of the streets which surround it, the contrary of what I have mentioned in the case of the mosque of Ishbīliya [Seville] and the mosque of Marākish [Morocco]. Then I entered, and saw a great mosque, of ancient structure, without decoration, or any pomp in the mats which ran round part of the walls and were spread on the floor. And I observed that the people, men and women alike, made a passage of it, treading it under foot, and passing through it from door to door to make a short cut: and the hawkers were selling in it all sorts of kernel-fruit, and biscuits, and such like, and the people ate of them in many parts of the mosque, neglecting the reverence due to the place, according to the custom holding amongst them in such matters. And a number of children were going about with vessels of water to those who ate, and made a living out of what they got from them: and the remains of their

¹ Ibn Sa'id al Maghribī arrived in Alexandria in A.H. 639 (A.D. 1241), and seems to have remained in Egypt about ten years. He visited and examined carefully everything worth seeing in Al-Kāhira and Al-Fustāt, and described them in a book, of which we unluckily possess such fragments only as have been quoted by later authors. The present passage is part of a longer one quoted by Al-Makrizī, i. 341 sq.

food lay about the court and corners of the mosque; and roof and corners and walls were covered with cobwebs; and the children played about the court: and the walls were written upon with charcoal and red paint in various ugly scrawls written by the common people. Nevertheless, in spite of all this, this Mosque has a certain grandeur and magnificence of effect upon the feelings, which you do not experience in the Mosque of Ishbiliya, in spite of all its decorative display, and the garden in its midst. And I observed that I experienced in it a soft and soothing influence, without there being anything to look upon which was sufficient to account for it. Then I learned that this is a secret influence left there from the fact that the Companions of the Prophet (may God accept them!) stood in its court whilst it was building. And I was pleased with what I observed in it of the circles of students sitting round those appointed to lecture in the Kurān and theology and syntax in various parts: and I enquired about the sources of their livelihood, and was told that it came from the legal alms and such like: I was also told that it was very difficult to collect it, except by means of influence and great trouble. After this we left the Mosque, and passed on to the shores of the Nile."

The above passage sufficiently indicates the state of neglect into which the Mosque had fallen when the dynasty of Saladin was drawing to its close. Accordingly, we find that the first Mamlūk Sultan, Izz-ad-dīn Aibak (A.H. 648-655 = A.D. 1250-1257) replastered and repaired the Mosque, scraping the columns and restoring the marble pavement and increasing it, "until the whole was paved with marble, and there was no part of the floor without marble, even beneath the mats."¹ Notwithstanding the repairs effected by Aibak, it was found in the reign of Baibars (A.H. 658-676 = A.D. 1260-1277) that the north wall was out of the perpendicular, and threatened to fall. The chief Kādī,

¹ In this passage the Sabn is not meant to be included, as we shall see further on. Saladin had paved the S. colonnade, and Aibak would seem to have repaired this and paved the three others.

having made a personal inspection, and consulted the architects, stopped the water running into the Fiskiyya, or fountain, on account of the damage it was causing to the foundations. He also built buttresses against the north wall of the Mosque proper, inside the northern Ziāda: and at the same time removed the greater number of the chambers which had been gradually accumulating on the roof. The expense of these repairs was defrayed from the revenues attached to the Mosque. It was soon found, however, that the structure was still unsafe: and an appeal to the Sultan for help from the public treasury resulted in the *complete rebuilding of the N. wall*, and the removal and replacing of some of the columns, and the rebuilding of the arches above them. At the same time all the columns were polished, and the whole Mosque replastered.

Twenty-one years later (A.H. 687 = A.D. 1288), in the reign of the Sultan Kalāwūn, certain repairs were carried out under Izz-ad-dīn al-Afram: and the neglected state of the Mosque is shown by the statement that he "cleared away the dust and refuse that was in the Ziādas."

The next event in the history of the Mosque was an earthquake which took place in A.H. 702 (A.D. 1302), and did much damage. The restoration was entrusted by the Sultan Muhammad ibn Kalāwūn to the Amīr Salār, who among other things pulled down many Mosques which were on the East of Al-Fustāt, for the sake of their columns, with the material of which he intended to pave the Sahn. Not contented with this, he pulled up many of the longer pieces with which the rest of the Mosque was paved: arranged the whole in piles near one of the doors of the Mosque: and—never even began the paving of the Sahn!

This period, however, is the very latest to which the style of the stucco details¹ on the N. wall will allow us to refer the unrecorded extension of the Mosque to the N. It will be remembered that Ibn al Mutauwag († circ. A.H. 730) describes the Mosque of his day in terms which show that

¹ The mihrāb on the outer side, and some remains of blind windows in stucco on the inner side.

it still preserved the dimensions of A.H. 212:—the length N. and S. being only 86·7 metres. Now our present Mosque has in this direction a length which, measured at right angles to the S. side, can hardly be made less than 115 metres. We have therefore a difference of some 28 metres to account for: and we have now arrived at a period, later than which we cannot place that addition. If, therefore, Ibn al Mutaawag's details are to be accepted as correct, we must suppose that very soon after he measured the Mosque, it was enlarged on this side to its present dimensions. We have, however, already remarked a reason for suspecting that his dimensions N. and S. were too small: and here we must add an additional one, which, if valid at all, is final: namely, that the bit of wall to the N.W., which would about make the difference required, has generally been regarded from its style as the oldest in date now surviving, and as taking us back to very early times. Now if this argument from style is to be relied upon, it is absolutely necessary to give up the dimensions of Ibn al Mutaawag, and to suppose that they refer to an earlier date than his own. It is very probable that Al-Makrizy, in picking out the different details given by his predecessor, has mixed up two different periods.¹ In this case, we should naturally conclude that the Mosque of about A.H. 730, containing 378 columns, had reached practically the area of the present day: and the columns will fit exactly into the space as in Pocock's plan (omitting one row in the E. and W. colonnades). Plan V. will then still represent the Mosque of A.H. 212: but we shall no longer be bound to the number of columns, and may remove the extra columns which we placed round the Sahn. The extension N. and S. represented by the bit of wall at the N.W. corner would then have to be placed at some unknown time between A.H. 212 and A.H. 730: and the stucco details of the N. wall could then be attributed to Baibars, who we *know* rebuilt this side,

¹ It is to be remarked, that Al-Makrizy evidently had no notion of the coincidence of Ibn al Mutaawag's square measures with the long measures of A.H. 212.

and to whose time I should certainly prefer, from their style, to refer them.¹

After hearing of the manner in which the Mosque was "restored" by Salār, we are not surprised to learn that the northern and eastern Ziādas fell in at some unspecified time after his date: and that the next notice we find is that the Mosque fell into disrepair, "and its arches were out of the perpendicular, and it was on the point of falling in, while the great ones of the realm after the death of Sultan Barkūk (A.H. 801=A.D. 1399) had too much other business and pleasure to attend to." Under these circumstances a certain Burhān ad dīn, chief of the merchants, took up the matter, and resolved to restore the Mosque at his own expense and that of his fellows. The whole Kibla side of the Mosque was once more taken down and rebuilt, "in its whole length and breadth, from the Great Mihrāb to the Sahn:"² the breaches or weak points in the walls were all repaired: and the whole Mosque was plastered, "so that it became new again, after it was on the point of falling in, had not God (whose glory and majesty are exalted!) raised up this man, in spite of the fact that he was a notorious skinflint and miser, to restore it."

This restoration was completed in A.H. 804 (A.D. 1401), and is the last one of which Al-Makrizy, writing about A.H. 823 (A.D. 1420), gives us any account. We may therefore insert at this point a few details which he gives us, relating to the Mosque with which he was himself familiar in his own time. It possessed two celebrated copies of the Korān, of which one was named after Asma, the daughter of Abd-al-Azīz, governor of Egypt. Al-Makrizy traces its history from the time when it was first written by order of Abd-al-Azīz, in A.H. 76 (A.D. 695-6). The other copy was known as the Mus-haf of Osmān, but many people doubted

¹ The ornaments in the spandrels of the mihrāb are exactly repeated in a frieze running along the S. end of the great Mosque of Baibars ("Port Schulkowski") outside Cairo to the North. Altogether, we may take the N. wall as fixed to the time of Baibars.

² Here, again, the actual wall does not seem to be included in the part destroyed.

its authenticity. At one period these two books were used in the prayers on alternate days: but after A.H. 375 (A.D. 985-6), the second was disused, and the chapter read every day in the copy of Asma. Al-Makrizy also gives many details as to the special parts of the Mosque which were traditionally held to be favourable to the answering of prayer. Among these was the roof, which the worshipper should go round seven times, repeating prayers at certain points. He likewise enumerates a total of nine different places in the colonnades and court where lectures on theology were given. He relates a tradition which says that before the plague of A.H. 759 (A.D. 1358) there were no less than forty of such lectures held. We have already seen that they were to the traveller Ibn Saïd one of the most pleasing features in the Mosque when he visited it a century earlier.

Deserted by our chief guide, we find many long blanks in the history of the Mosque. It is asserted that some restoration took place under the Sultan Kaïtbai, who reigned A.H. 872-901 (A.D. 1468-1496).¹ The authority next in date with which I am acquainted is the plan in Pocock's "Description of the East" (vol. i. p. 26), which is introduced in Plan VI. The date of publication of this volume of Pocock's work was A.D. 1743 (= A.H. 1156), or 150 years at least later than any restoration that Kaïtbai could have made. This plan is a piece of material of considerable importance: but unluckily we find some difficulty in interpreting it, and cannot feel any great confidence in its correctness. The unit of the scale, though not given, can only be the foot. We thus get for the N. and S. sides a length of 287 ft., and for the E. and W. sides 272 ft.: or 87·5 and 82·92 metres respectively. Now we have seen that already in A.H. 212 (A.D. 827) the measures were $109·82 \times 86·7$ metres: and we have just been following the history of the Mosque since that date, and can assert that if the area had changed at all in the interval, it was by an increase to the north. Further,

¹ My authority is Aly Pasha Mabarak, now Minister of Public Instruction in Egypt, in his book *Al-Khitat Al-Gadida*, iv. 8, where he quotes from a work entitled *Nuzhat au-Nazirin*, of which I know nothing.

we know that the length of the Kibla side at the present day is practically the same as it was in A.H. 212, though the E. and W. sides have increased in length. Add to this, that the number of columns from E. to W. is in Pocock's plan 22 (representing the 21 of the present day), while from N. to S. it is 21 as against 23: and we are forcibly led to ask whether Pocock's scale is not false, while his proportions, and the number and arrangement of his columns, may in all probability be, roughly speaking, correct? The facts make it impossible to accept the scale, and many examples show that Pocock is casual and inaccurate in his plans, which can never be trusted in detail.¹ Accepting, therefore, his plan for what it is worth, and remarking the coincidence in the number of columns on the kibla side with that of the present day, let us suppose this side in his plan to represent 109·82² metres, more or less; and the other side in proportion. The plan will then, in all probability, really represent, though roughly, what Pocock actually saw. He no doubt counted the number of columns along the sides, and measured the sides themselves, or possibly only the kibla side, by pacing, or by calculation from the inter-columnar spaces, or by some other rough and ready method: the result being, that the "feet" of his scale are feet of

¹ It will be enough to give the following examples:—

"*Plan and Upright of a Roman Castrum at Old Cairo*," vol. i. pl. ix., which has been characterized by Mr. Butler (*Coptic Churches of Egypt*, i. 176) as "so very erroneous in places where it can be challenged that it is quite untrustworthy where it cannot."

"*Plan and Upright of the Gate Nasr*" (vol. i. pl. xiii.), in which the plan given is really a very incorrect one of the Bab al Futūh, and not the Bab an Nasr; while the "upright" bears only the very faintest resemblance to either one or the other.

"*Map of the Country about Cairo*" (vol. i. pl. vi.), where, not to speak of the utter inaccuracy of the whole map, the outline of Cairo itself is quite comically unlike what it has ever been.

"*Upright of the Great Pyramid*" (vol. i. pl. xvii.), which is at once recognized by the most casual observer to be much too acute an angle.

It is fair to add that in the Preface (p. v) the author himself says: "Nor does he intend to be entirely infallible in his plans: and though he took great pains in measuring all the ancient buildings, yet he is sensible there may be omissions and mistakes, though he endeavoured as much as possible to avoid them." I need hardly add, that in insisting on Pocock's defect in this respect, I have no thought of detracting from the general merits of that excellent traveller.

² The measurement of A.H. 212, which is only a fraction of a metre more than that of the present day.

about 15 inches each. Having therefore readjusted his scale, we get an area of 109·82 metres by about 104 metres. Supposing for a moment that Pocock's plan is now roughly correct, we see that there is an addition of some ten metres in the length N. and S. since his time: and since we have the N. wall fixed to the time of Baibars, we are obliged to suppose the addition to have taken place to the S. Now not only is the S. wall, though patched and out of the straight line, manifestly old, but the bit of W. wall which joins it and runs along about the depth of the S. colonnade, is old work, apparently of the same scheme as the bit of the same wall at the N. end. It would seem, then, that Pocock's plan cannot be really correct in its proportions; that no addition in the length N. and S. can really have taken place since his time. We may however suppose that his arrangement of columns represents, though with schematic regularity, instead of accurate fidelity to the facts, what he saw in 1743. The general result is that there is an inaccuracy or a lacuna somewhere in our historical materials: and that the enlargement of the Mosque N. and S. from 86·7 metres to its present length of say 115 metres is nowhere recorded: but in all probability must have taken place not long after the enlargement by Ibn Tāhir (A.H. 212 = A.D. 827), as already hinted above.

In the period between Pocock and the present day, we find an account of one complete restoration,—namely, that by Murād Bey in A.H. 1212 (A.D. 1798): and it is undoubtedly to this date that we must refer the general features of the Mosque as we now see it. We owe the account of this restoration to the Sheikh Al-Gabarty, who was a member of Napoleon's diwān, and wrote a sort of journal of the events of the period of the French expedition and later.¹ He tells us that the mosque had long fallen into a state of disrepair: that since the burning of Al-Fustāt it stood amongst mounds

¹ This entertaining and valuable book, the first two volumes of which contain also much information concerning the personages and events of the preceding century, was published at Bōlak in A.H. 1297 (=A.D. 1880). The passage concerning the restoration of the mosque will be found in vol. iii. p. 170.

and dust-heaps, the few houses that remained being some distance off, on the banks of the Nile, and even those mostly some way North, by the mouth of the Canal. The few inhabitants had other small mosques in their immediate neighbourhood, and did not frequent the Old Mosque. "I have indeed witnessed a time," continues he, "when the people prayed there on the last Friday in Ramadan. The common people then assembled from Al-Kāhira and Misr and Būlāk, to amuse themselves, and with them would come also some of the princes and grandees. And the musicians and ape-leaders and conjurors and mountebanks, and the dancing-women known as Ghawāzy, gathered together in the Sahn. Then this fell into disuse about thirty years ago (*i.e.* about 1770, less than thirty years after Pocock's visit),¹ on account of the ruinous state of the mosque and its surroundings, the roof and columns having fallen in, and the left-hand half (*i.e.* the E. colonnade) being out of the perpendicular, nay, having actually fallen afterwards!"² Murad Bey, then, being anxious about his soul, was persuaded by certain religious persons to undertake the restoration: and he expended upon it large sums "which he had taken impiously and employed unrighteously:" "and he set up its corners, and strengthened its construction, and arranged its columns, and perfected its decoration, and built two minarets to it, and restored the whole roof with sound wood, and plastered (or whitewashed) the whole of it: and when it was finished, the result was the best imaginable. And he put Faiyūm mats upon the floor, and hung lamps from the ceiling: and an assembly was held in it on the last Friday of Ramadan, A.H. 1212" (= March 18, 1798, just one thousand years after the enlargement of the mosque by

¹ The passage in Al-Gabarty was written in 1801, the year of Murad Bey's death.

² The expression is inexact, and therefore we cannot say for certain whether it is meant that the E. wall actually fell. Probably in the first part of the sentence, he is thinking of the S. colonnade, which is always the most important; and in that case the latter part need not apply to the wall, but to the columns only, as the expression would more naturally imply. As a matter of fact, there is only one point in the E. wall (just N. of the northernmost of the two buttresses near the S. corner) where we remark remains of work of the oldest type.

Ibn Tahir). Four months after this, Murād Bey was fighting the troops of Napoleon at Embāba, in the so-called "Battle of the Pyramids," on which the celebrated "forty centuries" looked down. . . . "And when the French appeared the next year,"¹ continues the old gentleman, "the mosque suffered like others by destruction and ruin and the taking away of its timbers, so that it became a deserted building more unsightly than before." This last expression is probably an exaggeration: but it is certain that the Mosque must have suffered considerably.

Since that date repairs on a small scale have been made on several occasions: and the remains of square pillars in the W. colonnade testify to an abortive attempt at restoration by Abbās Pasha. In the main, the Mosque as we see it bears the impress of Murād Bey's hand, and there are not less than four dated inscriptions recording the fact of his restoration. The minaret in the S. W. corner is no doubt of his time. As to the small domed chamber with the tomb, it is evidently, in its present form at all events, of very modern date. The outer walls are built of rubble, and the join between them and the older brick walls is distinctly visible, especially on the S. side, where also the brick wall has been repaired with rubble at the date of the building of the chamber. It is obviously much later than Murād Bey,—whose restorations, also, were all done with brick: but I have not been able to discover any record of its origin. One is tempted to conjecture that Murād Bey built his second minaret in this corner, to match the other: for the minaret over the great N. door is certainly of an earlier date: and we are told distinctly by Al-Gabarty that Murād Bey "made two minarets" to the Mosque. If this is correct, the second minaret could have stood in no place but this: and its disappearance is thus satisfactorily accounted for. As to the Hanafiya in the Sahn, it may be doubted whether it dates from Murād's restoration, or later. It is not mentioned by Al-Gabarty in the passage already quoted:

¹ The new lunar year of the Muslims, 1213, having begun on June 16, 1798.

and the fact of its being so far to the N. of the centre of the Sahn¹ as it stands now, points to the probability of the later date: for Murād's restoration would no doubt include a considerable N. colonnade, which the position of the Hanafiya would not allow. As to the date of the various portions of the walls as we see them now, but little can be said. The actual origin of the N. one only is fixed,—and that to the time of Baibars. The N. and S. ends of the W. wall I take to be the oldest portion remaining in any recognizable form:—of these the latter might date from A.H. 212 (A.D. 827) and the former probably very soon after; very possibly from the restoration by Khumārawaih, A.H. 273 (A.D. 886). It would be idle to attempt any detailed account of the other portions: but the testimony both of recorded history and of the walls themselves points to an early date for the greater portion. In fact, there is no evidence that any wall, except the N., has been *entirely* rebuilt since A.H. 212 (A.D. 827): while the colonnades have been rebuilt piecemeal on many occasions.

In the work of Pascal Coste, "*L'Architecture Arabe, ou Monuments du Caire*" (Paris, 1839), is a plan of the Mosque (Planche I.) already referred to in a note above. This seems to be the original of all the guide-book plans. We plainly recognize in it the general scheme of the present Mosque, but the regularity of the sides and of the lines of columns obviously cannot represent the real facts as Coste must have seen them: just as his view of the Mosque (Planche II.) represents columns and capitals as if just new from the stonemason's hand. One further feature, which has disappeared entirely from all the present plans, must be noticed. This is a Ziāda, no less than 50 metres deep, running along the whole N. side of the Mosque, and forming an open court with a body of buildings on the E. and W. sides, containing baths, stables, etc. It occupies the space in front of the Mosque now covered by the mass of huts. No mention is made of it in that part of the

¹ The plans in the guides (following Coste) place the Hanafiya in the exact centre, whereas it is a long way nearer to the N. than to the S. side.

text which gives a general description of the Mosque: but incidentally (vol. i. p. 31) we are told, "The two bodies of buildings in the first court are entirely destroyed: *I have restored them* according to the indications of certain foundations which I have discovered by excavation." Considering the very untrustworthy nature of Coste's plans, the casual method in which he is apt to restore on small evidence, and his fatal leaning towards neatness and symmetry on paper, where the facts show inexactitude and want of symmetry, it is very difficult to say how much importance we are to attach to the whole of this portion of his map. It is plain from his text that it partakes more or less of the nature of a restoration; and probably the most we are justified in inferring from it is, that in 1839 there were still recognizable some indications of a Northern Ziādā.¹

At the present day the south colonnade alone is kept in a certain state of repair. Its northern row of columns has been strengthened by substituting piers for every third column, and in some other cases by building up the double columns so as to make them the core of a solid pier. The last Friday of Ramadān once again sees an immense congregation from Cairo and its suburbs flock to the Mosque for the midday prayer: and a certain amount of white-washing to the N. façade and in the S. colonnade is usually done for this occasion. Until some time within the last eight years, a curious scene happened after this Friday prayer. On entering the Mosque by the great door under the minaret, we observe that the second support to the left consists not of a single column, like the rest, but of two,—the space between them being blocked up with plaster. There had arisen among the people a fable or tradition that the righteous man only could pass between these two columns: be he never so stout, he would meet with no difficulty: whereas the wicked, however thin, could never thrust himself through. Accordingly, after the prayer of the last Friday in Ramadān, there was an immense crush round this

¹ The stucco mihrāb on the outside of the N. wall is in itself sufficient to prove the former existence of a Ziādā here.

spot, for a trial of character by this bizarre ordeal: scenes highly indecorous in such a place and on such an occasion were the necessary result: and the space has been very properly blocked up, as above mentioned. There is also another column of which a fable is related. It stands on the left front of the mimbar, immediately to the right of the central mihrāb. On the lower part of the shaft may be read the name of the Prophet, repeated no less than seven times, besides other names, no doubt written by the faithful in the spirit which seems from time immemorial to have incited the idle traveller thus to deface the monuments which he visits. The people seem to believe that the Prophet's name appeared on the column in some supernatural manner, or at the least that it is there by a freak of nature. The fact is that the effect has been produced by careful hammering on the surface of the marble, the crystalline structure of which is thus disturbed, with the result that a *bruise*, so to speak, is left on the column,—the name in some instances being quite smooth to the touch, and even with the surface of the marble. In other cases, however, the name is roughly incised with some blunt instrument. The legend, related, as all such legends are, with countless variations, tells us that Amr asked the Caliph (Omar) for a column from Mekka, to place in the colonnade of the new Mosque. Omar turned to a column and ordered it to go to Egypt, but it did not stir. He repeated the command three times, adding the third time a stroke with his whip. As the column took no notice, he then conjured it in the name of God to rise and go to Al-Fustāt. This time it obeyed: and they show certain veins in the marble, which they say are the marks of the Caliph's whip. This version of the story is a more modest one than that which the traveller will probably be told by his dragoman or cicerone: for such persons usually put the Prophet himself (who had been dead some years before the conquest of Egypt) in the place of Omar. In any case, the poor column expiates its sin of tardy obedience: for the people beat it with their sticks and slippers after the prayer of the last Friday in Ramadān.

One other occasion there was in comparatively near times, when the Mosque witnessed a great assembly, not only of the faithful, but also of other confessions. This was the *Istiska*, or prayer for water, which took place when the Nile was late or deficient in its rise. In the work of Pascal Coste above quoted (pub. 1839), we read (vol. i. p. 31) that "When the rise of the Nile is delayed, and there is fear of famine in the coming year, it is the custom for the head of the Government to invite the Ulema, the Sheykhs, the Rabbis, the Coptic, Greek, and Catholic priests, to come to the Mosque of Amr with their flocks. Each sect then forms in a group outside the precincts of the Mosque, to implore the succour of heaven. . . . This ceremony takes place with great order and devotion: all confessions show a mutual deference, and conduct themselves as if they all formed one family." That this ceremony has really taken place more than once, there can be no doubt: but as to details, accounts differ. The last occasion of which I have found any authentic record is as far back as 1808.¹

The circumstances are related by Al Garbarty (vol. iv. p. 80). It seems that in the month of Gamādy I Ūla, A.H. 1223, the Pasha (Muhammad Aly) was anxious to make a tour to Damietta, Rosetta and Alexandria: but he could not go without first attending the ceremony of the cutting of the dyke at the mouth of the canal of Cairo. So he sent for the keeper of the Nilometer, and said: "Cut the dyke to-morrow or next day." The reply was that the Nile was not sufficiently high. On the 27th (=July 22, 1808) the river fell five fingers; and there was great consternation. The Sheykhs met at the Pasha's, and he said to them, "Make the prayer for water, and bid the poor and the sick and the children to go into the desert: and call upon God." After some discussion, "they agreed to go and pray for water in the Mosque of Amr ibn al Āsy,

¹ I have since this been informed by the Sheikh Osman Madūkh, a trustworthy authority, that he remembers the *Istiska* prayer's taking place when he was a small boy, some time in the fifties, —*i.e.* between 1250 and 1260 A.H. = A.D. 1834-1844.

because it was a place where the Companions of the Prophet had been: there they would offer the prayer for water, and call upon God, and humble themselves before him." So this was done the next morning: and in that night (Sunday night) the water rose to where it was before. On Monday morning the people came out again: "And some advised that the Christians also should be summoned: so they attended: *and they sat on one side of the Mosque, smoking.* And that night the water rose, and it was proclaimed to have reached the height required. And the people rejoiced, and the Christians began to say, 'The rise is entirely owing to our going out to the Mosque.'" In reading this account it is impossible not to suspect that the old Sheykh has misrepresented the facts, from a certain fanatical feeling which made the participation of the Christians distasteful to him. In a book by Edouard Gouin, entitled "*L'Egypte au XIX^e Siècle*" (Paris, 1847), a very different colouring is given to the matter; and we are told (p. 204) that "The Ulema and the students, the Arab and Turkish Imāms, were mixed up with the Rabbis, the Coptic, Greek, and Roumanian Patriarchs, the Latin *religieux* of the Holy Land, the Italian missionaries of the Propaganda, the Maronite priests. It formed a truly sublime function,—this reunion of all ages, all rites, all idioms, in one single fervent prayer." Unluckily, the author tells us nothing of the authorities from which he draws his facts: while there can be no doubt that Al Gabarty must have attended the ceremony in person. Nevertheless, if we discount a little the rhetoric of the French author (whose whole book, indeed, is very frothy in style), his account will no doubt fairly represent the truth.

Prayer is still held in the Mosque, and there is a sermon every Friday. I have myself attended such a service, and the number of worshippers was between fifty and sixty. Of the theological lectures no trace remains: and the whole revenues of the Mosque amount to a little less than thirty-two pounds sterling.¹

¹ Aly Pasha Mubārak, *Al Khatat al Qādīda*, vol. iv. p. 8.

IV.—GENERAL RESULTS OF THE INQUIRY.

We have thus traced the history of the Mosque of Amr from its foundation down to the present day; and in so doing we have attempted, as far as might be, to present authentic facts in an intelligible form. For this is the best method of dispersing the clouds of vague speculation and exaggerated tradition by which the subject has long been surrounded and obscured. It is true that the guide-books of to-day no longer treat the present Mosque as the original structure, nor perhaps as absolutely representing the original plan of the founder: for an abstract of Al-Makrizy's historical account, published by Mr. E. S. Poole in an appendix to the later editions of Lane's "Modern Egyptians," has made it impossible to hold the old theories in their barest form. Yet we still read in the latest edition of a popular handbook to Egypt (1880) that from Al-Makrizy's account "it is evident that little of the original edifice founded by Amr remains:" which is not putting it strongly, when we consider that the *whole* of Amr's work was destroyed 58 years after its foundation,—that is to say, nearly 1200 years ago. The same account of the Mosque, after assigning a high antiquity to the exterior walls, and remarking that "it may be doubted if the Arabs in the time of the conquest of Egypt had made sufficient progress in architecture to build a Mosque of the size and character of this of Amr," adds the curious reservation, "though they added to the interior in later times," which can only mean, if it means anything, that the *area* has not been increased from the beginning. Again, exaggerated notions are afloat as to the original splendour and magnificence of the Mosque. Now it will hardly be contended that that splendour was subsequent to the time of Al-Makrizy: for he lived in a period when the Mosque had already fallen into that state of neglect and decay from which it has never since arisen. On the other hand, there can be no doubt at all that had Al-Makrizy found in his authorities any startling accounts of the

magnificence of the Mosque, he would have transcribed them : such is his invariable custom, and he delights, as indeed do all Arab writers, in such details,—the more astonishing the better.

The obvious conclusion is, that all such accounts are of late origin. Indeed, all the details which we glean from Al-Makrizy tend to show that the Mosque, though no doubt it was a grand sight in its best days, owed its effect almost entirely to the vistas of columns and the numerous hanging lamps : and that splendour of detail held but a small place in it. It can never, for instance, have come within miles of rivalling the great Mosque of Cordova, either in scale or in splendour of material and decoration : as a mere glance at that wonderful building will show, deformed though it be by the ill-judged zeal of the ecclesiastics who turned it into a Christian cathedral. This comparison suggests in its turn that of the Mosque of Seville, which was on exactly the same lines as the Cordovan building, and has been compared with the Mosque of Amr by Ibn Saïd in a passage quoted above.¹ It will be remembered that that traveller found the Mosque of Amr to be "a great mosque, of ancient structure, without decoration, or any pomp:" and that he enlarges on the disgraceful state of dirt and neglect into which it had fallen. Yet he found in the Mosque a certain "grandeur and magnificence of effect upon the feelings," which the Mosque of Seville, with all its elaboration of decorative display, did not possess. He acknowledged there "was not anything to look upon which was sufficient to account for it," and ascribes the effect to the fact that the "Companions" had stood in

¹ Of the Mosque of Seville there remain only the western court and the minaret (the celebrated "Giralda"). The rest of the original site is occupied by the Cathedral, which covers the area of the mosque. The court which remains is the identical part of the mosque inaccurately referred to by Ibn Saïd, as "the garden in its ruins," the fact being that the plan of this mosque, like that of Cordova, and apparently most West African mosques of the colonnaded type, differed from the Egyptian plan in having one huge forest of columns on the Kibla side, while the Sahn formed a forecourt to the whole. The existing court at Seville contains a fountain supposed to be the original fountain of ablution, and is planted with orange trees, most of which are said to date from the sixteenth century. According to O'Shea's *Guide to Spain and Portugal* (ed. 1885, p. 115), "There were always many trees in it, especially palms and cypresses, many of which were destroyed in a hurricane in 1822."

its court whilst it was building. In this feeling experienced by the old traveller we find at once the origin of all the exaggerated notions of the architectural merits of the Mosque, and the ground of the real interest and importance attaching to it. That interest is in fact to the pious Muslim a religious one: just as it is to us an historical and sentimental one. We see in Ibn Saïd a cultivated traveller, who was familiar with the most splendid buildings of Andalusia and Western Africa, honestly deceiving himself into finding beauty in a mosque which he has himself just described as practically devoid of any; and that because he was under the influence of religious sentiment. How strongly such feelings appeal to the pious Muslim, any one who has lived among them must know: and we shall consequently relegate to the realms of fable the story related by a certain "Abdel Rachyd el Bakouy," that "the whole of the Kurān was written in Kufic on the walls of the mosque, upon slabs of white marble, with the titles adorned with gold and azure,"¹—at least till such time as it shall be proved that the said Abdel Rachyd was a trustworthy writer contemporary with the facts which he describes. This story is indeed, on its present basis, on a level in authority with that related to me by one of the servants of the Mosque, who, when told that the original Mosque of Amr was smaller than the present one, was much scandalized, and asserted roundly that it was an established fact that the Mosque had extended all the way to the tomb of the Imām-ash-Shāfiʿī, say a mile and a half as the crow flies!

We have seen again that on the occasion of the prayer for water the reason given for resorting to the Mosque of Amr was the fact of the Companions having resorted there. Indeed, we may be certain that this natural and pious veneration for a spot hallowed by such associations has been the sole reason for the survival of the building at all, when so much of later work on a grand scale has disappeared from

¹ Description de l'Égypte, second edition, Paris, 1829, vol. 18, p. 464. Who this gentleman was, and when, where, and on what authority he made the above statement, we are not told.

around it. It may help us to realize that this statement is no exaggeration of the facts, if we consider that Saladin, while still nominally Wazir of Al-Ādid, founded two great theological colleges,¹ both in the immediate neighbourhood of the Mosque of Amr, and that of them, as of numberless others, no trace now remains.

Yes, the interest attaching to the "Old Mosque" is one of historical association and sentiment. Few places are more favourable to a moralizing spirit: and to those who are familiar with the general course of history in the Egypt of Muslim times, it will always preserve a certain melancholy interest. While looking from the roof or the minaret over the scene of desolation around him, the traveller will certainly renew once more the old story of the transitory nature of all human splendour and prosperity; and may well exclaim, in the words of the Book:² "Every creature on the earth passeth away: but the face of thy Lord, endued with majesty and honour, abideth for ever."

¹ Called the *Madrasa Nasiriya* and the *Madrasa Kambliya*. They were devoted to theology after the sects of Ash Shāfiʿi and Ibn Mālik respectively (*Al-Makrizy*, ii. 363-4).

² *Korān*, iv. 26, 27.

ART. XVI.—*Titles of the Sanskrit MSS. in the Todd and Whish Collections of the Royal Asiatic Society.*

[In the absence of a proper catalogue, which the Council of the Society hope soon to have prepared, the following rough list of the titles of the Sanskrit MSS. in the Society's collection may prove useful to scholars.]

SANSKRIT AND PRÂKRIT MSS. (TODD COLLECTION).

1. Âditya Purâṇa. Foll. 108. Samvat 1665.
2. Bhaviṣhyottara Purâṇa. Foll. 386. Samvat 1720.
3. Gârūḍa Purâṇa. Foll. 321.
4. Hari-Vansa. Samvat 1879.
5. Aṣṭa-medha-Parva of the Mahâbhârata. Foll. 271. Samvat 1732.
6. Padma Purâṇa. Samvat 1726.
7. Dipârṇava Śilpa-Śâstra. Samvat 1878.
8. Graha-lâghava. Foll. 42.
9. Hakikat. History of Jeypur. Foll. 52 and 17. Hindi.
10. Upadeṣa-Mâlâ. Foll. 43.
11. Nṛsiṃha Purâṇa. Foll. 100. Samvat 1787.
12. Brahma Purâṇa.
13. Upadeṣa Taranginî. Foll. 60. 2700 slokas.
14. Vâyu Purâṇa. Foll. 383. Samvat 1875 1675 (?).
15. Kirâtârjuniya. Foll. 73. Samvat 1696.
16. Sâraswata-Vyâkaraṇa. Foll. 71. Samvat 1710.
17. Abridgment of Hema Chandra's Grammar. Foll. 18. Samvat 1531.
18. Vâsu-pûjya-Caritam. Incomplete. Foll. 94.
19. A Jain Ritual. Incomplete form. Foll. 8½.
20. Nirayâvali Sâtra. Foll. 41.
21. Ratnâkara Ṭikâ. Foll. 71.
22. Tâjika Sâra. Foll. 48. Samvat 1805.

23. Samjñā Tantra. Foll. 17. No date.
24. Hindu Calendar. Ll. 63.
25. Part of Skanda Purāṇa. Foll. 235.
26. Part of Skanda Purāṇa. Foll. 408.
27. Hira Saubhāgya-Kāvya-Tikā. Foll. 92. Samvat 1596.
28. Prajñāpanā-Tikā. Foll. 211. Samvat 1617.
29. Tattva-Cintāmaṇi. Foll. 47.
30. Sandeha Vishaya. Foll. 97.
31. Kumāra Pāla Rājarishi-rāja. Foll. 186. Hindi.
Samvat 1746.
32. Śārngadhara Paddhati. Foll. 296.
33. Vṛddha-Ātrunājaya-Mābātmya. Foll. 794. Samvat
1787.
34. Kālikācārya-Kathānaka. Foll. 112. Samvat 1461.
35. Saṅghayana Sūtra. Foll. 40. Samvat 1705.
36. Astronomical Tables. Foll. 24. Samvat 1723.
37. Pañcalingya-Prakaranam. Foll. 271. Samvat 1308.
38. Raghuvansha. Foll. 116. Samvat 1646.
39. Kūrma-Purāṇa. Foll. 277. Samvat 1655.
40. Agni-Purāṇa. Foll. 506. Samvat 1700.
41. Jamba-Kumāra Rāsaka. Foll. 22. Samvat 1794.
42. Hammira Carita. Foll. 100.
43. Shadvidyāśyaka-Sūtra. Foll. 93.
44. Dravya Kirāṇāvali. Foll. 36.
45. Astronomical Tables. Foll. 77. Samvat 1789.
46. Bhāvadhyāya. Foll. 43. Samvat 1818.
47. A Jain work. Foll. 159.
48. Karpūra Prakarakam. Foll. 39.
49. Megha Mālā, an astronomical work. Foll. 26. Samvat
1801.
50. Singhāsan Batisi. Foll. 53. Hindi. Samvat 1824.
51. Svapnādhyāya. Foll. 5. Samvat 1824.
52. Karmavipāka-sūtra. Foll. 18.
53. Praṇa-cūḍāmaṇi-sāra. Foll. 23.
54. Ramala-śāstra-bhoja. Foll. 15.
55. Ratnacūḍarāsa. Foll. 14. Samvat 1678.
56. Karaṇa-Kutūhala. Foll. 18.
57. Grhalāghavasāraṇi. Foll. 15. Samvat 1777.

58. Ratna-dīpa. Foll. 17.
59. Astronomical Tables. Foll. 112.
60. Chand's Prithvirājarāsa. Foll. 141.
61. Jāna Sāgara. Foll. 32. Samvat 1501.
62. Sthānānga-sūtra-vritti. Foll. 439.
63. Tilamasa-lāñchana-vicāra. Foll. 25.
64. A Prākṛit work. Foll. 63.
65. Śāntināthadeva Caritam. Foll. 137. Samvat 1665.
66. Shadvidhā-vyākhyā. Foll. 11.
67. Niraya Sūtra. Foll. 24.
68. Vikramashāparāchoracaritram. Foll. 6. Samvat 1727.
- 69-71. Śrī Bhāva-vishaya. Hindi. Foll. 76. In 3 parts.
72. Acaladasabhojavatari. Foll. 14.
73. Madhura gachha. Foll. 16.
74. Inatadharma-kathā-sūtra. Foll. 134.
75. Sangrāma Sāra. Foll. 285.
76. Sangrāma Sāra. Foll. 98.
77. Mahābhārata. About 1500 leaves.
80. Vansa-kulola-sāra-samuccaya.
81. Dholambharōjikibāta. Foll. 198.
82. Prithivirājarāsaka. Foll. 259.
83. Pānini. Foll. 57.
84. Bhīmasena's Dhātu pātha. Foll. 19.
- 85 and 87. Hemachandra. Foll. 107, 106.
- 86 and 88. Prakriyā Kaumudī. Foll. 129, 139.
89. Kridanta-Prakriyā.
90. Siddhānta-Kaumudī. Foll. 92, 53.
91. Mājha Kāvya. Foll. 247.
92. Amara Kosha. Foll. 21, 109.
93. Medini Kosha. Foll. 69.
94. Haima Kosha. Foll. 62, 52, 53.
95. Trikaṇḍaśeṣha. Foll. 35, 20.
96. Uttara-Rāma-Carita. Foll. 37.
97. Bhoja-prabandha. Foll. 62.
98. Janaki-pannayam. Foll. 38.
100. Trishashtithālākāpurusha.
101. Kshetrasamāsa.
102. Sangiti-ṭikā.

103. Rathakārasaṃskāra.
104. Rāmacaritamānasa. 7 chapters.
105. Śabdaratnāvalī. Incomplete.
107. Śāntināthacarita.
111. Bhaṭṭikāvya.
112. Gaṇaratnamahodadhī.
113. Navasāhasāṅkacarita.
114. Caccarisankshepavivarṇa.
115. Pradeśirājarāsa.
118. Rasakṛīḍāvarṇanā. Foll. 27.
119. Vīvekamañjarī.

SOUTH-INDIAN SANSKRIT, ETC., MSS. (WHISH COLLECTION).

1. *a.* Rigveda, Mand. I. 18. 2—23. 1, with Sâyana's Commentary (= Asht. II. 1—3).
b. Aitareyâranyaka, 1st Âranyakam, with Sâyana's Commentary.
2. Rigveda, Mand. I. 13. 2—18. 1, with Sâyana's Commentary (= Asht. I. 5. 23—8. 26).
3. Brahmagitâ (Skandapurâṇa), in 12 chapters.
4. Commentary on the same.
5. *a.* Subodhini (Prâyaścitta).
b. Kaulâcâram, by Viṣvânandanâtha (Kaulâdarṣatantram).
c. Sri cakrapratishthâvidhi.
6. *a.* Śaktisûtram, with Bhâshya (3).
b. Bhâvanopanishad.
c. Naṭanânandâ.
7. Hâlâsya Mâhâtmya (Skanda Pur. Agastyasamhitâ).
8. Advaitamakaranda Vyâkhyâ.
9. *a.* Sûta-gîtâ, with Comment. by Mâdhavâcârya.
b. Bhâgavata Pur. XII. 1—7, with Comment.
10. Râmâyana. Bâla and Ayodhyâkâṇḍa, with the Comment. of Śri Râmânuja.
11. Ekâdaṣaskhandasâraṣlokaśaṅgraha, with Comment. by Brahmânandabbârati (Bhâgav. Pur. XI.).
12. Sûryasiddhânta I.—VI. 6. VII.—XIV.
13. Rigveda I. 1. 1—37th varga, with Sâyana's Comment.
14. Śankara's Taittirîyaka bhâshyam.
15. The Îṣa and Kena Upanishad, with Śankara's Comment.
16. Pûrva and Uttara Tapinî Upanishad.
17. *a.* Atharvasirasopanishad, with Commentary.
b. Śri vidyâ ratnasûtram, with Comment.
c. Rahasyopanishad.
d. Amṛtabindûpanishad.
e. Tripurisundarî Upanishad.
f. Kâlâgnirudropanishad.
g. Kaivalyopanishad.

- h.* Skandopanishad.
- i.* Manopanishad.
- k.* Tripuropanishad and another.
- 18. The Âdi and Sabha Parvans of the Mahâbhârata (Malâyâlam character).
- 19. Bhâgavata Purâṇa I.-IX. (Malâyâlam character).
- 20. *a.* Charaṇavyûha.
- b.* Śatarudriyam (T. S. IV. 5).
- c.* Bṛihadâraṇyakam, 17th Kāṇḍam. (Upanishad).
- 21. *a.* The Rudra (Taitt. Saṁh. IV. 6), with Comment.
- b.* Maṇḍala Brâhmaṇa (Ath. V. ?). 7 Foll.
- 22. Sankara's Chândogyopanishadvivarāṇa (complete).
- 23. *a.* Sankara's Commentary on the Kâthopanishad.
- b.* Praṇopanishad.
- c.* Muṇḍakopaniṣad.
- d.* The Upadeśagranthavivarāṇam (Vedânta).
- e.* Sankara's Vivekacûḍâmaṇi.
- 24. *a.* Śabdakakṣaṇam.
- b.* Bhâradvāja.
- 25. *a.* Mantrapraśnabhâṣyam, in 22 Kāṇḍas.
- b.* Grihyam, in 23 Kāṇḍas. Foll. 21.
- 26. Mantrapraśnabhâṣyam, by Haradattâchârya.
- 27. Svarabhâṣyam.
- 28. Srimantrapaddhati, by Viṣveṣvara (imperfect).
- 29. Mayakhamâlikâ, a Comment. in 2 Adhyâyas on the Śâstradîpikâ (Mûn.) Somanâtha.
- 30. Sivagitâ, in 16 chapters (from the Sivarâghavasamvâda of the Yogaśâstra of the Parabrahmavidyâ).
- 31. Kaivalyopanishad. (See No. 86.)
- 32. Sankara's Âtmabodhaprakaraṇa, with Comment.
- 34. Yayamangalavyâkhyâ, a Commentary by Bhaṭṭa Nârâyaṇa on the Sahesranâmastotram.
- 36. *a.* Ujjvalâ, a Commentary by Haradatta on the
- b.* Dharmapraśna-sûtra (11 paṭalas). Vols. I, II.
- 37. The Taittiriya Prâtiśâkhyâ, with the Commentary (Tri-lohâṣhyaratna) complete. (Foll. 13, 117.)
- 38. The Bhâgavata Purâṇa. Books XI, XII., with Commentary of Sridhara.

39. The Bhagavadgītā.
40. Sridharasvāmin's Commentary to the Bhagavad Gītā.
41. The Devīmāhātmya of the Mārkaṇḍeya Purāṇa.
42. *a.* Kulārṇava, in 17 chapters (uttāra). Foll. 25.
b. Mantrākṣharamālā. Foll. 3
43. *a.* Śaṅkara's Śrīviṣṇupādādīkeṣaparyantastuti, with
Commentary.
b. Bhagavadgītā, 3 chapters called the Uttaragītā.
45. Ratirahasyam (Kokkokaśāstram), in 10 chapters. Foll.
36.
46. Mayūra's Sūryaśatakam, with Commentary.
48. *a.* Kārttika-māhātmya of the Padma Purāṇa.
b. Vaiśākha-māhātmya, of the Skānda Purāṇa.
49. *a.* Rudranyāsam.
b. Itihāsam.
c. Somotpatti.
d. Vedapādastavam.
50. *a.* Kusalavopākhyānam (12 chapters) of the Asvame-
dhikaparvan of the Jaimini Bhārata.
b. Srirangamāhātmya of the Brahmāṇḍa Purāṇa.
51. Mahābhārata, Parvans 14-18.
52. The Tulākāveri Māhātmya of the Agni Purāṇa, 30
chapters.
- 53A. Part of the Mahābhārata. Foll. 168.
- 53B. *a.* The Virāṭa Parvan. Ch. 1-11.
b. The Kumbhaghṛṇamāhātmya from the Brahmāṇḍa
Purāṇa (12).
54. The Rāmāyaṇa. Books I.-VI.
55. The Adhyātmarāmāyaṇa of the Brahmāṇḍa Purāṇa.
56. Uttara Rāmāyaṇa.
57. The Upadeśasahasrikā, with a Commentary.
58. *a. b.* Śaṅkara's Śārīraka mīmāṃsā bhāṣyam, in 4
adhyāyas.
59. Bhārati-tīrtha's Pañcadaśī with the Commentary of
Rāmakriṣṇa.
60. *a.* The Sūryasiddhānta (text only).
b. Pāṇini.
c. Viṣṇubhujanga.

61. The *Śivatattvasudhānidhi* of the *Skānda Purāṇa*.
62. The *Araṇyaparvan* (3) of the *Mahābhārata*.
63. Rāmānuja's Commentary on the *Araṇya*, *Kishkinda*, and (part of the) *Sundara Kāṇḍa* of the *Rāmāyaṇa*.
64. *a.* *Hastamālaka prakaraṇam* (Vedānt).
b. *Āryādhsatī* (102).
c. *Advaitamakarandam*.
d. *Nilakantha-Dikshita's Ānandasāgarastavā*.
e. *Atharvaṇa rahasyam*.
f. *Brahmānanda Bhāratī's Vākya-rudhātīkā*.
65. The *Paulomika* and *Āstikaparvans* of the *Mahābhārata*.
66. The *Vākya-vṛttiprakāśikā*, a Commentary by Sarvesvara paṇḍita on Śankara's *Vākya-vṛtti*.
67. *Śrī Maṇḍideva's Mahānātaka*.
68. Rāmānuja's Commentary on the *Yuddhakāṇḍa* of the *Rāmāyaṇa*.
- 69A. A Commentary (*Laghudīpikā*) on the *Vākya-karṇa*, by Sundararāja, in 5 chapters. Astronomical Tables.
- 69a. The *Lalitopākhyāna* (34 chapters) of the *Brahmaṇḍa-purāṇa*.
70. *Rudraprayoga* (?) (*Taitt. Samh.*).
71. Maheśvara's *Mahābhāratasaṅgraha* (Anthology).
72. Bhāṭṭotpala's Commentary (*vivṛiti*) on Varāhamihira's *Bṛhatsaṃhitā*—the *Vārāhasaṃhitā*—p. 3. 23.
73. *a.* *Pārshadavṛtti*, a Commentary on the *Śikshā*.
b. *Taparīṭikā*.
c. *Āvarṇivyākhyāna*.
74. *Smṛitimuktāphatām*, by Vaidyanāthadīkshita; 1st chap., called *Varṇaśramadharmanirūpaṇa* (256).
75. The *Gṛhyavṛtti* of Rudraskandha, in 3 paṭalas (*Sāma Veda*).
76. The *Sūtasamhitā* of the *Skānda Pur.* in 43 chapters.
77. The *Ratnāpaṇam*, a Commentary on the *Prataparudriyam*, on rhetoric, in 9 chapters.
78. *a.* *Sarvānukramapī*. Foll. 55-86.
b. *Tātparyabodhinī*.
c. Commentary on *Kaushītaki gṛhya sūtram*.

- d. Āṣvalāyana's Gṛihyasūtram (and Śrautasūtram ?).*
79. *a. Śri Śankaracaritam, in 9 chapters.*
b. Parāśarasmariti, with Mādhava's Commentary (to the end of chapter 4, in Malayālam char.).
80. Haribhaktisudhodaya, with Commentary (in 20 chap.)
81. *a. Sadānanda's Vedantavāraprakaraṇam.*
b. Panchadaśaprakaraṇam.
c. Śakuntalanāṭakam.
82. Commentary on the same, by Śrinivāsācārya.
83. Venkaṭanātha's Śatadūṣhaṇi (66 chapters)
84. Udyoga Parvan (5) of the Mahābhārata.
85. Sāyaṇa's Mantraparvan (2 chapters), being part of Chandoga mantra brāhmaṇa bhāṣyam, also the Mantrapāṭha, the text of the preceding.
86. The Droṇaparvan (7) of the Mahābhārata, 1-33.
87. Śankarasāṃhitā of the Sivarahasya Khāṇḍam of the Skānda Purāṇa, in 7 books, Part I. (see No. 102).
88. *a. The Pratāpa Rudriyam (not quite complete).*
b. Sivārcanaśiromaṇi (incomplete), by Brahmānandanātha.
89. Adhikaraṇaratnamālā (to IV. 2).
90. *a. Śaunaka's Gṛihyapariṣiṣṭa.*
b. Vaidyanāthadīkṣita's Lararahasya.
91. Khāṇḍa Deva's Bhāṭṭa dipikā, I.-VI., XI., XII. A Comment. on the Mīmāṃsā sūtras.
92. Śankara's Bhāṣhyaratnaprabhā, a supplementary Commentary on Vyāsa's Brahmasūtras.
93. Bodhāyana's Dvaidham (i.e. Kalpasūtram), with Commentary.
94. Swayamprakāśānanda's Commentary on the Mīmāṃsā sūtras, called the Paribhāṣārtha-saṅgraha-vyākhyā.
95. *a. The Candrajūānāgamasangraha, in 15 paṭalas.*
b. Viśvānandanātha's Kaulādarśatantra.
96. Abstract of Śankara's Prapañcasāra.
97. *a. Dakṣiṇāmūrtisaṃhitā, in 40 paṭalas.*
b. Kumārasāṃhitā, in 10 paṭalas.
98. Two Kalpasūtras, the second with Commentary.
99. *a. The Vādaratnāvali.*

- b. Keṣavamisra's Tarkaparibhāṣhā (Nyāya).
 c. Yayarāmabhaṭṭāchārya's Kārakapāda.
 100. Part of a Commentary on a work on Nyāya. 70 leaves.
 101. Gautama's Dharmapraśna, with Haradatta's Comment.
 (the Mitāksharā), not quite complete.
 102. Śankarasamhitā, Part II. See No. 87.
 103. a. Brahmānandayatin's Śrīmadbhāṣyārthasaṅgraha
 (Mal. character).
 b. Sāṅkhyavivarana tattvakaumudī, by Śrībodhabhāratī.
 c. Text of the Sāṅkhya-Kārikā (Mal. character).
 104. Vedānta-śāstra-siddhānta-leṣa (bheda, sāra)-saṅgraha
 (Grantha character).
 105. a. Śrī Rāmakrishṇapādavarīn's Vedāntaśikhāmaṇi.
 b. Dharmarājādhananīndra's Vedāntaparibhāṣhā.
 106. Prapañca hṛdaya (encyclopædia of literature), 8 paṭalas.
 107. Kumārīlasvāmin's Mīmāṃsātantravarttikam; 1st to
 3rd chapters (Mal. character).
 108. The Kavalayānandīyam Alankāraśāstram.
 109. Nāṭyalakṣhaṇam, a short treatise on the drama.
 110a. a. Commentary (Subodhinī) on the Bṛīhaj-jātaka of
 Varāhamihira (II. xxv.).
 b. Trilokasāravākyānam.
 c. Śankara on the Viṣṇusahasranāma (Mal. char.).
 d. Commentary on the Pādātī Keśantastutit. (Mal.
 character).
 110b. a. Divyamangalādhyānam.
 b. Lalitādevīstotram.
 c. Triṣaṭi.
 d. Ambāstavam.
 e. Mānasapūjā.
 f. Anandasāgarastavam.
 g. Charchāstavam.
 h. Kalyāṇavṛṣṭistavam.
 i. Paramārthasāram.
 k. Kartavīryārjunakavacham.
 111. a. Vedāntasāra (Mal. character).
 b. Kṛishṇīyam (Mal. character).
 c. Śatimanjari (Mal. character).

- 112a. *Nārāyaṇāyastotravyākhyā* (Mal. character).
 112b. a. *Mātrikāstavam*.
 b. *Mātrikanyāsam*.
 c. *Tripurāśṭottaram*.
 d. *Mātangikavacam*.
 e. *Mātangyashṭottaram*.
 f. *Bālāsahasramamām*.
 g. *Tripurāstavam*.
 h. *Dakṣiṇāmūrttipancharam*.
 i. *Gapapatyashṭakam*.
 k. *Āryādviṣati*.
 113. a. *Caturvedabhāṣyam*, 149 verses. Foll. 102.
 b. *Maṇimañjarī*, a Commentary on the *Vṛittaratnākara*.
 114. a. The *Tarkacūḍāmaṇi*, by Bāhvṛicha Dharmarāja, in refutation of the *Nyāya*.
 b. Another work, not named.
 c. (*Nyāyadushinī*) by the same author, on the same subject (Mal. character).
 115. a. *Horāvivarāṇam* (Mal. character), a Commentary on the *Bṛihajjātakam*.
 b. *Praṣṇāmṛita*.
 116. a. *Śrīkhaṇḍadeva's Bhāṭṭadīpikā*, Books VII.-IX. See No. 91.
 b. The *Bhāṭṭachandrikā*, by the same author. Foll. 133.
 117. The *Ashtāṅgahṛidaya*, on medicine (Malay. character).
 118. Commentary (*vivarāṇa*) by *Nārāyaṇa*, the pupil of *Kṛishṇa*, on the *Kumārasambhava*, I.-VIII. (Mal. character).
 119. The *Amarakosha* explained in Malayālam.
 120. (*Tantra sangraha*valiya *bhāṣhya* in Malayālam.)
 121. *Jayamangala's* Commentary on the *Bhāṭṭikāvya* (Mal. character).
 122. *Siddhāntaśekhara* (Mal. character).
 123. *Siṃharāja's* *Vimṣati* (Mal. character).
 125. *Bhāgavata Pur.*, Chapter X. (Mal. character).
 126. *Kuvatayānanda-alankāraśāstra* (Mal. character).
 127. a. *Kāvyaśprakāṣa* (Mal. character).

- b. Paramārtha sāravivarapam (Mal. character).
 128. a. Vyavahāracandrikā (law) (Mal. character).
 b. Smṛiti candrikā (Mal. character).
 129. Commentary on the Viṣṇu-sahasra-nāma (Mal. char.).
 130. The Tulākāverimāhātmya of the Agni-Purāṇa (Mal. character).
 131. Tantrasangraha in Malayāḷma.
 132. Brahmottara purāṇa (44 chapters) (Mal. character).
 133. Amarakosha, with Malayāḷam explanation.
 134. Tantrasangraha, astron. portion (Kriyakātāpa), with Commentary (Mal. character).
 136. Bālabhārata (Mal. character).
 137. Commentary on the Gītagovinda (Mal. character).
 139. Parameśvara's Commentary on the Sūryasiddhānta (Mal. character).
 140. Śṛisahasranāma padyaṅgīti (Mal. character).
 142. Nārāyaṇīyam (Mal. character).
 143. Smṛiticandrikā (Mal. character), Vyavahāra, Chap. I.
 144. Lakṣmidhara's Commentary on the Gītagovinda (Mal. character).
 145. Various mantras, without title (Mal. character).
 146. Sārasangraha (astrol.) (Mal. character).
 147. a. Sāṅkhyakārikā, with Śaṅkara's gloss.
 b. Vācaspatimiśra's Sāṅkhyasaptatīṭhikā (Tattva Kaumudi).
 c. Aṇṇambhaṭṭa's Tarkasangraha, with his dīpikā (Ny.) (Mal. character).
 148. The Sarvārthacintāmaṇi and paddhati (astrol.) (Mal. character).
 149. Śūkerajāmāhātmya (Mal. character).
 150. Śivamāhātmya of the Sutasamhitā of the Skanda Purāṇa and the Yajñavalkyaśrautasaṁhitā (Mal. character).
 151. a. Sakuntala (wanting the end).
 b. Dakṣhayaṇaprabandha.
 c. Dātāprabandha (Mal. character).
 152. Tantrasamuccaya (law, etc.) (Mal. character).
 154. Ālankārasarvasvam (Mal. character).
 155. a. Mānaveda's Campūbhārata, in 6 stavakas.

- b. *Amarakosha*, with *Kshīrasvāmin's* Commentary (Mal. character).
 156. *Manushyālayamālā* (architecture) (Mal. character).
 157. *Mananam* (Vedānt), in 12 books, in Malayāḷma.
 158. *Sambhavaparvan*, Ch. 1-12.
 159. The *Prākṛitarūpavatāra*, by *Simharāja*, the son of *Samudrabandhayajvan* (Prākṛit grammar) (Mal. char.).
 160. *Amarakosha* (Mal. character).
 162. *Śivadharmottaram* (law).
 163. Part of the *Bhagavadgītā* (Mal. character).
 164. a. *Sankara's* Commentary on the *Bāhvṛicha-brāhmaṇopaniṣad* (Mal. character).
 b. *Ṣankara's* Commentary on the *Saṃhitopaniṣad* (Mal. character).
 165. *Rāmakṛiṣṇa's* Commentary (dīpikā) on the *Panchadaṣi* (Vedānt), I.-IV. (Mal. character).
 179. a. *Śrijayatī-māhātmya* (*Skanda Purāṇa*).
 b. *Bhāskaramata-māhātmya* (Mal. character).
 180. *Sankaracarita*, in 9 chapters (Gr.).
 181. The *Tarkasangraha* (Ny.) (Mal. character).
 182. The *Maṇimanjarī*, a Commentary on the *Vṛttaratnākara*, in 6 chapters (Mal. character).
 183. *Durgāśṭakam* (Mal. character).
 184. *Svapnādhyāya*, on dreams (Tel. character).
 185. *Bhadrādīpa* (astrol.) (Mal. character).
 186. Fragment of the *Mahāgaṇapaddhati*.
 188. *Chandrikā saptati* (Mal. character).
 189. *Āryādviṣati* (see No. 64), or 102 *Āryā* stanzas (Mal. character).
 190. *Bhojaprabandha* (not quite complete) (Gr.).
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CORRESPONDENCE.

1. SIR M. MONIER-WILLIAMS ON TRANSLITERATION.

MY DEAR PROFESSOR RHYS DAVIDS,—While heartily concurring in what Sir Monier Monier-Williams says about the urgent necessity of some uniform system of transliterating the Dēvanāgarī and related alphabets, I venture to think that he has omitted to lay sufficient stress on an aspect of the subject which is not very familiar to scholars in England, though it is pressed daily, almost hourly, on the attention of those of us who study the vernaculars on the spot in India. I must commence by apologizing for any mistakes I may make as to the contents of Sir M. Monier-Williams' article, for I have no books by me. The article went to India with all my books a day or two after I received it.

The point to which I wish to direct attention is that it is not sufficient to deal with the Dēvanāgarī alphabet merely so far as it relates to Sanskrit. The alphabet, variously modified, is used in all the Neo-Aryan languages, and in some of the Dravidian languages, of India. No system of transliteration would be complete which did not consider their needs as well as those of Sanskrit.

To begin with, the vowel *ṛi* presents difficulties, for the usual transliteration clashes with the Neo-Aryan rolled *ṛa* (ॠ). Under the usual system it is impossible to say whether *ṛi* represents ॠ or ॡ. As both the vowel *ṛi* and the rolled *ṛa* are cerebrals, it is convenient to use, in transliteration, a diacritical mark below them in both cases. Probably it would be simplest to represent ॠ and ॡ by *two* dots, thus *ṛa*, *ṛha*. Or if printers object to this, a short line underneath might be adopted, or a hollow circle, thus, *ṛa*, *ṛha* or *ṛa*, *ṛha*. I do not advocate any particular sign, I only wish to point

out that it is necessary to be able to distinguish between **अ** and **इ**, when transliterated.

I think that a long mark should certainly be used in transliterating **ए** and **ओ**, thus *ē, ō*, not *e, o*. These vowels (or diphthongs) are certainly long, and in the Neo-Indo-Aryan (which I shall henceforth call, for shortness, the Gaudian) languages, they have each a short fellow, —thus **प**, and **औ**, which it would be against analogy to transliterate *e* and *o*. In my opinion, just as **उ** and **ऊ** are transliterated *u* and *ū*, so **प** and **ए** should be transliterated *e* and *ē*, and **औ** and **ओ**, *o* and *ō*. It should be noted that the short *e* and *o* both occur in Prākṛit.

The diphthongs *ai* and *au*, though long, I would not propose to mark as long, simply on grounds of convenience to printers. *āi* and *āu*, and especially (with capital letters) *Āi* and *Āu*, are clumsy, and printers object to them. At the same time it must be noted that, at least in Hindī poetry, cases occur of these diphthongs being metrically short (**प्रे**, **औ**); as the cases are comparatively rare, I see no objections to then transliterating them *ai* and *au*.

In certain dialects (Bhoj'purī for instance) the vowel *a* has a special sound, corresponding almost to *aw* in *have*. This is *not* instead of the usual "a in America" sound, but *in addition* to it. There are in fact two long *as*, viz. the ordinary *ā*, and this *aw* sound. Natives represent this *aw* sound in two ways. Some use the *avagraha*, thus **कहः**, and others the *visarga*, thus **कहः**; in either case the word is pronounced *kahaw*. As neither *avagraha* nor *visarga* are used in the Gaudian languages for their proper purposes (the Bāṅgālī **पितः**, 'O Father,' is an invention of the paṇḍits) there is no risk of confusion in reading the native character, but it would never do to transliterate the *avagraha* or *visarga*, as if they were the same as the signs used in Sanskrit. The sound invariably results from a contraction of the older Apabhraṃṣa Prākṛit *ahu*, thus *kahahu*, *kahau*, "*kahaw*," and I would suggest that it should be represented in transliteration by *ā*, the sign ^ˆ representing contraction, thus *kāhā*.

add that this is the sign used by Dr. Hoernle and myself, in our Bihārī dictionary.

One other point about *a* may be noticed here, though it is not directly connected with the question of transliteration, for natives rarely mark it themselves in the Dēvanāgarī character. It is the shortened sound of *ā* (आ) which that letter takes in the antepenultimate or before a double consonant. Thus मारिबे, हास्तिन (vulgar for हस्तिनापुर). In these cases the vowel is pronounced short and sharp like the *a* in the Italian *ballo*. The representation of the sound by a diacritical mark would not, strictly speaking, be transliteration, for, as already stated, natives rarely denote it in Dēvanāgarī, but the attention of the committee might be drawn to the fact of the existence of this sound, and arrangements made for its representation in the Roman character. In the Bihārī dictionary we represent it by *ā*, thus *māribē*, *hāstin*. The mark is, however, purely arbitrary.

So much for the vowels. We now come to one point which I think purely Sanskrit scholars are apt to neglect. This is the distinction between *anustāra* and *anunāsika*. The latter sign is rare in Sanskrit, practically occurring only in one rather uncommon instance of external *sandhi*, and nine Sanskrit scholars out of ten would maintain that the two signs are practically identical. I have not my books by me, but if I had, I think I could point out passages in standard Sanskrit grammars to the same effect. As a matter of fact these two signs are essentially different. I do not venture here on to the thorny ground of discussion as to the real pronunciation of *anustāra*, but there can be no doubt that from very early times *anunāsika* was not a distinct letter or sound, but simply a nasal qualification of an already existing vowel sound. *Anunāsika* is very common in the literary Prākṛits, and it is to be regretted that some editors of Prākṛit texts have not always made the distinction between it and *anustāra* sufficiently clear. Putting all questions of pronunciation to one side, there is this grand difference between the two, that while *anustāra* makes a preceding short vowel long by position, *anunāsika* has no effect on the

quantity of the preceding vowel. Thus हि is metrically long, but both हि and हि are short. Almost any page of the fourth book of Hēmaçandra's Prākṛit grammar will give examples of this. *Anusēdra* proper is rare in the modern languages, being confined to *tatsama* words, though the sign also occurs in the by-use of it as a compendious way of writing a class nasal. Examples, ईस (*tatsama*) a swan, (but ईस (*tadbhava*) a smile), अंडा an egg. *Anunāsika* on the contrary is very common in these languages. For instance, in Hindi it occurs in every feminine plural, in every oblique plural, and in numerous verbal terminations. A useful example is the very common word मे (not मे) for "in." This is usually transliterated *meñ*, or in some such way, the nasalization of the vowel *e* (wrongly written *e*) being denoted by an *n*, to which some diacritical mark is added. I give this word as an example of the evil which may unconsciously be worked by a bad system of transliteration. It should be remembered that transliteration is not meant for scholars only, it is also meant for learners.

Now a great many learners go to India with a small knowledge of Hindūstānī picked up from Forbes' Manual, quite enough for any conversational requirements which may present themselves, *provided they properly pronounce the words they have learned*. As a rule they do pronounce wonderfully well, but this one word *meñ* proves a stumbling-block to eight out of ten of them, and as it is of common occurrence, they are frequently unable to make themselves understood. I have known cases in which, the vicious pronunciation having been once acquired, it took people several years to get rid of it and acquire the correct one. The fact is that the *n* at the end of *meñ* is too much for the learner. Instinctively he neglects the dot, and pronounces the word like the English word "men"; in which case he pronounces two out of the three letters absolutely wrongly. All this arises from a misconception of the proper power of *anunāsika*. It is no more a letter than the dot under a cerebral *f* is a letter. It is merely a diacritical mark, notifying that the vowel over

which it is written is to be pronounced through the nose,—exactly as the *o* in the French *bon* is pronounced. It is true that the grammars tell learners that this is the effect of the *ñ*, but the latter forget the instruction and are misled by the transliteration. Therefore I strongly urge (1) that *anundsika* be represented by a different sign from that of *anuscāra*, as representing an entirely different sound, and (2) that this sign should be a diacritical mark (over or under) the vowel which it nasalizes, and never by another letter following it. What sign should be used is a matter of secondary importance. I myself use the mark [~], thus *bās*, a smile, *mē*, in, and this has received the *imprimatur* both of the Royal Asiatic Society and of the German Oriental Society. Prof. Pischel uses the original [~], thus *ha[~]s*, *mē[~]*, and if this sign could be used over, instead of after, the affected vowel, it would be every bit as good as mine. Some printers object to forms like *ā̃*, *ē̃*, etc., as involving new types, and in that case I believe that no difficulty would be experienced in printing *ā̃*, *ē̃*, if the *ā* and the *ē* were cast “kern.” This would obviate the necessity of cutting new punches.

Regarding the class-consonants and the semi-vowels, I have no remarks to offer. I have already drawn attention to the awkwardness of the present system of transliterating ऋ and ॠ. As for the sibilants the matter is a little more complicated than in Sanskrit, owing to the existence of Persian words in the Gaudian languages. Personally I prefer *ç* for ऋ and *ş* for ॠ because they “run” better in appearance with their class-consonants *çc*, *çch*, *çt*, *çth*, look neater, more workmanlike, than *śc*, *śch*, *śt*, *śth*. This is, however, merely a matter of personal taste, and I do not wish to insist upon it. But the existence of the Persian *shin* ش in Hindī has to be considered. This will require a little explanation, and the following facts have to be borne in mind.

(1) The written character does not make the language, and there are certain Hindī works written in the Persian character, just as there are certain Ūrdū works written in

the Dēvanāgarī character. An example of the former class is the *Padmāvat* of Malik Muḥammad, the language of which is very old, and very pure, Hindī.

(2) Hindī, whether written in the Persian or in the Dēvanāgarī character, borrows a portion of its vocabulary from Persian; an example is the word شمشیر *shamshēr*, a sword.

(3) Hindī writers differ in the use of the Sanskrit sibilants. Some, who form the pedantic class, write श्र when it occurs in Sanskrit. Thus, they write शुद्ध, "pure." Others, including all the great writers of past centuries, as well as a large class of modern writers, invariably change a Sanskrit श्र to स, thus following the pronunciation. They write सुद्ध, because in Hindī pronunciation, a Sanskrit श्र is always pronounced as if it was स.

(4) The writers of the second class, having in this manner found the श्र thrown upon their hands, and available for other purposes, have adopted it to represent in Dēvanāgarī the Persian ش. Thus they write *shamshēr* शमशेर.

To sum up, Hindī and Sanskrit have between them (omitting the cerebral ś for the present) three sibilants represented by two signs. They both have the dental स *sa*. Sanskrit, and Hindī as written by pedants, have also the palatal श *ṣa*. Hindī, as written by the best writers, has also the Persian ش represented by श्र. This last श्र requires a separate transliteration, for though शमशेर might be transliterated *ṣam'ṣēr* in transliterating from Hindī written in Dēvanāgarī, this transliteration would never do in transliterating شمشیر from a Hindī book written in the Persian character, for we must be consistent. I therefore propose that the dental स should be transliterated *sa*, that the sign श्र should be transliterated *ṣa* when it represents the Sanskrit palatal sibilant, and that it should be transliterated *sha* when it represents the Persian *shin*.

This conclusion drives us to adopting *ṣa* for the Sanskrit cerebral sibilant ष. There is one point, however, to which

the attention of the Committee may be drawn, and that is that in Hindi व standing alone is usually pronounced *kha*, and is indeed often actually written ख. Thus the Sanskrit वष्ट is in Hindi pronounced *khashṭh*, and is frequently written खष्ट *khashṭh*. The transliteration of व under these circumstances deserves consideration.

One other point, and I shall conclude. The Gaudian languages have a series of what Dr. Hoernle and I call "imperfect vowels." These are vowels one half pronounced, like the final vowel in Brighton, pronounced *Bright'n*. The commonest is the imperfect *a*, in words like देखता *dēkhatā*, pronounced in prose *dēkh'tā*. Some European scholars treat the vowel as elided altogether, and write देखा, *dēkhā*, but this is wrong. The vowel is distinctly audible, though very imperfectly pronounced. I would suggest that this imperfect *a* should be represented by an apostrophe, thus *dēkh'tā*. In the Dēvanāgarī character it is sometimes represented by the sign ः, thus देखःता, which I have heard called *arddha-halanta*. The imperfect *i* and *u* are less common. They occur at the end of words as in *matī*, *madhu*, written in Dēvanāgarī मति or मत, मधु or मध. In either case the *i* or *u* is there, though very faintly pronounced. I would represent them in transliteration by *i* and *u*, thus *matī*, *madhu*.

Believe me,

Yours very faithfully,

G. A. GRIERSON.

2.

Sept. 25, 1890.

MY DEAR PROFESSOR,—I thank you for allowing me to see the proof of Mr. Grierson's letter on transliteration. As we have now a transliteration committee sitting—of which I am a member—I will not anticipate our report by any comment on Mr. Grierson's valuable suggestions. Permit me, however, to say that in my own paper on transliteration (p. 628

of the July number of our Journal, paragraph 8) it would make my meaning clearer if instead of the word *pronunciation* were substituted *local varieties of pronunciation*.

Yours faithfully,

MONIER MONIER-WILLIAMS.

The Secretary of the Royal Asiatic Society.

3. HERODOTUS ON THE MAGIANS.

SIR,—It was some time ago the fashion to find fault with Herodotus and to accuse him of wilful misrepresentation; but the father of history was more often the victim of his dragoman. As noticed by Sir H. Rawlinson, the informant of Herodotus at Babylon was not a Persian, but he was probably a Median, hostile to the Persian rule, and we can often detect how the errors accepted by Herodotus sprung from the ignorance, spite, or fancy of his dragoman. On previous occasions I have shown how the names of Ninus and his wife Semiramis and the legendary hundred gates of Babylon were invented. Now I think I have found the key of the legend related by Herodotus about Smerdis the Magian.

We know from the Behistun inscription that the real name of the usurper was Gaumata, a Magian, not a priest as is generally understood, but a member of the Medic tribe of the *Magi*. Gaumata, to take possession of the throne, personified Bardia or Smerdis, brother of Cambyses. Everywhere the people, tired of the mad rule of the latter, accepted the new king with joy. But Gaumata betrayed himself when he favoured the Medians and their religion against the Persians; this would have been sufficient to raise the suspicion, and he was besides, says Herodotus, betrayed by Prexaspes. This was enough to reveal to the Persian that Gaumata was not Cambyses's brother, but an impostor, and to provoke the conspiracy of the seven Persian noblemen headed by Darius. Then how originated the legend about the usurper having no ears? This fable, like many others, is based on a play of words; *Magus*, the

Persian form of the word Magian, was interpreted by "a man having no ears" *مانگوش*, and from this conundrum the popular imagination built up the story related to Herodotus by his dragoman. Many popular legends have a similar origin. In this case, what proves that the story was current in the East is that we find it in Justin (i. 9), who consulted other sources than Herodotus, as is shown by his giving the real name of the usurper, Cometes (Gaumata), not preserved by Herodotus. At a later date the name Magus (Magian) was explained in the same way and applied to those who did not follow the oral tradition, who therefore had *no ears* (Darmesteter, *The Zend-Avesta*, vol. ii. p. 4). We might perhaps find that the other errors and legends reported by Herodotus have a similar origin.

G. BERTIN.

The Secretary of the Royal Asiatic Society.

4. MODERN NAME OF "UR OF THE CHALDEES."

SIR,—In p. 430 of the April part of the Journal of the Royal Asiatic Society, l. 3, it is said that the "the modern name of the ancient city of Ur, the great city of the Sumerian race, is Mughîr," and in note 2 of the same page, Prof. Sayce, "Hibbert Lectures for 1887, p. 42," is represented as having given this name as "Mugh-ir."

May I be allowed to suggest, from memory alone, and from the long bygone days when my friends, Mr. Loftus, Mr. Churchill, and Colonel Williams (afterwards General Sir W. Fenwick Williams, Bart., of Kars, G.O.B., etc.), first visited the cemeteries of that ancient city, and unearthed some of the asphalted jars in which the dead were inclosed for sepulture, and when Mr. Loftus, in his interesting work on his expedition, first gave publicly, in about 1848, the name of "Magheir" (I think) to the place, he being no Arabic scholar, I read the word, from inference, as being derived from the Arabic name for *bitumen*, *asphalte*, and *pitch*, *qîr* (قير). I took it to be the passive participle of the second

conjugation from that root, the word Muqayyer (مُقَيَّر), and to mean : asphalted, set in or coated with pitch, the pitchy place, the place of bitumen.

Whether this Arabic name of Muqayyer, pronounced by nomade Arabs in such a way,—Mugayyer, for instance,—as to induce a scientific English traveller, ignorant of their language, to write it, French fashion, "Mugheir," and whether my inference of "muqayyer" be correct or not, seems to me to need further investigation, before Mr. Loftus's "Mugheir" can be securely rendered into Professor Sayce's "Mugh-ir," and translated by Mr. Hewitt as meaning "the city (ir) of the Mughs," with the addition "The Semitic Ir is evidently the same word as the Akkadian Ur," and the further inferences that conclude the paragraph.

JAMES W. REDHOUSE.

The Secretary of the Royal Asiatic Society.

NOTES OF THE QUARTER.

(July, August, September, 1890.)

I. LIST OF ADDITIONS TO THE LIBRARY, JULY 15-OCT. 15,
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Catalogue of the Victoria Lending Library. With Appendix of some Books of Reference. Edited by F. W. Madden. sm. 4to. *Brighton*, 1890.

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vol. 2. 8vo. Paris, 1890.

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Ahmad. (pamphlet.) 8vo. Calcutta, 1889.

II. CONTENTS OF FOREIGN ORIENTAL JOURNALS.

1. JOURNAL ASIATIQUE.

Vol. xv. No. 2 for March (received 24th June).

1. E. Senart. Notes d'épigraphie Indienne.

2. E. Specht. Note sur les Yué Tchi.

3. P. Sarbatur. Index to the Agnishtoma.

4. J. Darmesteter. Le grande inscription de Qandahār.

No. 3 for April-June (received 24th August).

1. G. Maspero. Administration in Egypt during the
Third Dynasty.

2. G. de Harlez. San-li-tu.

2. WIENER ZEITSCHRIFT FÜR DIE KUNDE DES MORGENLANDES.

Vol. iv. part iii.

1. P. J. Dashian. Zur Abgur Sage (Schluss).

2. M. Winternitz. Notes on Ancestor Worship among Indo-European Nations.

3. Fr. Müller. Armenisches.

4. Th. Houtema. Zum Kitab al Fihrist.

5. H. Jacobi. Ānanda Vardhana and the date of Māgha.

III. OBITUARY NOTICES.

Mr. E. C. Baber.—We regret to have to record the death of Mr. Edward Colborne Baber, which occurred at Bhamo, in Upper Burma, in June last. For some years Mr. Baber's health had been failing, owing to repeated and persistent attacks of malarial fever. The seeds of this complaint were sown during his journey into Yunnan in South-Western China, to inquire into the circumstances connected with the murder of Mr. Margary. His subsequent residence in Seoul, the capital of Korea, increased his malady, and on his last return to England on leave, it was painfully plain to his friends that his constitution had been very seriously shaken by the constant attacks of the ailment to which he had been subjected. With, however, the keen sense of duty which distinguished him, he declined to apply for a further extension of leave when he recognized that his services were required on the Burmo-Chinese frontier; and he went out to take his place on the frontier-limitation commission with a full sense of the danger to his health and life that his service entailed. After some slight attacks of his old enemy, a serious illness of a febrile nature overtook him, and his constitution, having been weakened by constant ill-health, succumbed to the further strain now put upon it. In spite of every care and attention, he died after a few days' illness, and thus there has been lost the services of one who, if it had not been for his oft infirmities,

would unquestionably have achieved marked distinction in the fields of philological and geographical research.

As a boy Baber was educated at Christ's Hospital, and having gained the position of a "Grecian," went up with an exhibition to Magdalene College, Cambridge. Being a man of independent and liberal views in religion as in other matters, he gained for himself when at the University a reputation for more thorough-going heretical opinions than he really held. After having completed his academical career, he competed successfully for an appointment in the China Consular Service, and in 1866 he joined the Student Interpreter Staff at Peking. Here he speedily distinguished himself by the progress he made in the language as well as by the exceptional talents and culture which he showed. His first years after leaving Peking were passed in the ordinary duties of a junior consular assistant, and it was not until 1875, when the murder of Mr. Margary made it necessary to despatch a commission to inquire into the circumstances of the crime, that his chances of distinction came. Mr. Grosvener was appointed commissioner, with Messrs. Davenport and Baber to assist him. On these two last-named officials devolved the duties of examining the witnesses on the scene of the murder, and the way in which they conducted their investigations received warm approval from Lord Derby. All those interested in the subject will remember the extremely graphic and interesting account of the journey between Tali fu and Momien, written by Mr. Baber, in the papers laid before Parliament. Of this account Lord Aberdare, when, as President of the Royal Geographical Society, he presented Mr. Baber with the Society's gold medal, said: "This narrative, in spite of the disadvantage of making its appearance in a Blue Book, and therefore obtaining but a limited circulation, yet 'a fit audience found, though few,' and made European geographers acquainted with the fact that a geographical observer and narrator of remarkable power had appeared in the far East."

One result of the Margary murder was the signing of the Chefoo Convention. Under the terms of this instrument a

Consular Agent was to be allowed to reside in the city of Ch'ung K'ing, in the province of Szech'uen, on the Upper Yang-tze. Most appropriately Mr. Baber was chosen for this service, and it was while he was officially resident at his new post that he made those expeditions in Eastern Szech'uen which have become memorable from the results achieved and from the description of them which was communicated by its author to the Royal Geographical Society. The much-coveted gold medal was awarded to him for the services he thus rendered to science, and in presenting this prize to him Lord Aberdare remarked, "Of these great services to geography I have given only the dry outlines. It is the merest justice to you to add that your journeys have been exceptionally productive, because of the exceptional store of various and accurate knowledge with which you started on your travels. Your mastery of the Chinese language, and of Chinese customs and habits of thought, enabled you to collect a great amount of miscellaneous information, which has been conveyed in narratives full of novelty, vivacity, and sustained interest. Altogether, both in these journeys and the report of their results, you have displayed the qualities of an accomplished traveller in a degree of which we have but few examples, and which fully justify our choice of you for sharing with Sir Joseph Hooker our highest distinction, even although you have, we firmly believe, only given the first-fruits of that rich harvest which we expect from your matured powers and enlarged experience."

In 1879 Mr. Baber was, on the death of Mr. Mayers, appointed Chinese Secretary of Legation at Peking, and in 1885 he was transferred to Korea as Consul General. In the confined and unhealthy atmosphere of Seoul his health broke down, and he returned on leave, only to go out to meet his death at Bhamo. While on his last leave he contributed to the *Journal* of this Society a most interesting paper, to which Professor de Lacouperie added notes, on some Formosan manuscripts written in Roman letters, and displayed his literary acumen by deciphering the meanings of several of the then entirely unknown words. By his early death at the age

of 47 the learned world has lost a distinguished member, and a wide circle of acquaintances a true and valued friend.

The Rev. John Davies.—We regret to have to hear, just as we are going to press, of the death at a ripe old age of this gentleman, one of our members, and the author of 'Hindu Philosophy, an Exposition of the System of Kapila,' etc. We hope to give an account of his life and labours in our next issue.

IV. NOTES AND NEWS.

The first publication in Pali with Bengali translation appeared at Chittagong in September, 1889. It consists of the *Sigālovādasutta* (*Dīghanikāya* II. viii.) with a Bengali translation by Dharmarāja Barua (*Vaḍḍya*?).

A-propos of Bengali Buddhism the attention of our readers may be directed to an account of Rāmachandra, afterwards called Bauddhāgama, the author of the *Bauddha-Çataka*, given in a recent number of the *Proceedings of the Bengal Asiatic Society* (Feb. 1896), contributed by Haraprasāda Çāstri.—C. B.

The Mahāvansa.—On the departure of Sir Arthur Gordon from Ceylon the Buddhist clergy and pandits presented him with a special address in acknowledgment of the service he had rendered to native literature by authorizing the printing of the *Mahāvansa* at the Government press.

The Gaekwar of Baroda and Old Gujerat Literature.—His Highness the Gaekwar of Baroda has more than once shown what a native prince with a liberal education can do for the advancement of knowledge and letters among his people. He has shown special regard for the cultivation of the vernaculars of the province among the masses, whom English will always reach with difficulty. Among other enterprises which his Highness has encouraged, says the *Bombay Gazette*, is a recently formulated scheme for collecting and publishing the works of old popular Gujerat authors, who have indirectly influenced the social life of the province. A committee of gentlemen keenly interested in education, like Dewan Baha-

dur Manibhai, Rao Bahadur Ambalal Desai, Khan Bahadur Jamshedji Dalal, and others, are supervising the work, and they have thrown themselves into it with much energy. They have already started a series which they call "Prachin Kavya Mala, or the series of Old Poems." Six numbers of the series are already before the public, and we are told by competent Gujarati scholars that the greatest care is displayed in selecting, editing, and annotating the poems. The first number, "Draupadi Harani," is a fine epic of the Miltonic type, with many passages of philological importance. The second and third numbers throw light on the Vallabhacharya doctrine of Vaishnavism, about which till now very little was known to popular readers. People who take an interest in the cause of female education will be glad to learn that two beautiful poems by two lady-writers, who flourished a century ago, have been published by this committee. One of these lady poets, Radhabai, though a Maratha Brahmin, has written in Gujarati some really pathetic verses, though her admixture of Marathi and Gujarati phraseology occasionally produces a strange effect. Very little is known about her and the other poetess, Divalibai, and in fact the Gujarati world did not even know of their existence. The committee have entrusted the work of editing and annotating to the Director of Vernacular Instruction, and we are assured that he deserves credit for the elaborate notes that he has written.

The Bo-Tree at Gāyā.—Mr. Strong has nearly finished his edition for the Pali Text Society of the *Bodhi-vamsa*, the history of the sacred Pippal or Aśvatthu tree (*figus religiosa*) at Gāyā. It opens with a rapid sketch of the previous incarnations of Gotama Buddha; then the story of the birth of the latter and his renunciation of the worldly life is told in the usual way. In due time he comes to the Bo-tree, and is assailed, rather than tempted, by Māra, who flees in terror when Buddha calls the Earth to witness. A long soliloquy on the part of Buddha then prefaces his self-dedication to a missionary career. From this point the story of his preaching and his converts follows the familiar outline with little deviation. Then follows the planting of the Bo-tree. A

fruit which had fallen from the original tree is brought and planted with great pomp at Jetavana by Anāthapiṇḍika, and immediately there springs up a Bo-tree fifty cubits high. This is made the object of a new cult, the Mahābodhipūjā, in which Buddha himself takes part. He then relates and explains the Jātaka story of Kālinga, after which he gives his final charge to his disciples, and then passes away in death. Then follows a description of the three councils and of the mission of Mahinda to Laṅkā-dīpa; while the remainder of the book is occupied with the cutting of the dakkhiṇamabāsākhā by Dhammāsoka, its transport to Laṅkā-dīpa by the nun Saṅghamittā, and its ceremonious reception by the king Devānampiyatisso, by whom it is finally planted, and who makes elaborate provision for its cult and preservation.

PROGRESS OF BIBLE TRANSLATION IN ASIATIC, AFRICAN, OCEANIC, AND AMERICAN LANGUAGES.

During the past year progress has been made in the translations in the languages noted below, which in many cases represents a progress in linguistic knowledge, as in many of the languages the Bible is the first and only book that has been printed.—R.N.C.

JULY 9, 1890.

Amoy, China, Roman alphabet.—An edition of 5000 copies of Mark in large type is being printed in Amoy. Proverbs (a favourite book with the Chinese) has been printed in a smaller size.

Amoy, China, Ideograms.—Genesis is being printed in large type, to meet a long-felt want.

Annam, Cochin China.—Luke, in the language of Annam, is now being printed in Paris. The translation was made by M. Bonet, and M. Charles Schefer reports, that it has been done with great care, and should be printed in the special form of written character of the country.

Arabic, Hebrew Alphabet.—The printing of an edition of

Matthew has been ordered, and the proofs will be read at Cairo.

Arabic (for the blind), (Braille).—After a considerable amount of correspondence, Dr. Armitage has been able to prepare the Arabic alphabet and the first chapter of Genesis for the use of the Arab blind. Copies of this adaptation have been supplied to various persons to be tested, and Dr. Armitage has written from Luxor, that he has read a chapter with the native pastor every night at the Mission, and that the system is liked.

Ararat-Armenian.—Some delay in the printing of the Bible has been occasioned by the removal of Mr. Amir-khaniantz to Helsingfors, in Finland, but it is hoped that good progress will now be made.

Bádaga, India.—Luke is now in the press, and will shortly be issued for sale. It is written in the Karnáta alphabet, of which language the Bádaga is a dialect, and is spoken by nearly 30,000 persons.

Bangáli, India.—The Calcutta Auxiliary Committee have under consideration the practicability of issuing a Bangáli Bible on thinner paper with cheaper binding; the present price of a Bible being equal to four days' pay of most natives.

Blackfoot, Canada.—The Committee have printed Matthew in the language of the Blackfoot Redskins. Mr. Tims made the version in the winter of 1884-5, and revised it twice with the aid of a Native. There are about 7000 speaking this language, of whom some few can read. Their location is on the east of the Rocky Mountains in Canada.

Bondei, East Equatorial Africa.—Matthew is now printed. Three educated Bondei natives have revised it, and one in England preparing for ordination has helped in the final revision. The translation was made by the Rev. J. P. Farler, formerly Archdeacon of Magila.

Canton, China, Roman alphabet.—An edition of 500 copies of Mark has been ordered to be printed; also an edition of 1000 copies of the four Gospels in Ideograms.

Wen Li, or Classical Chinese.—In May, 1890, a general

conference of missionaries met at Shanghai. One of the points under discussion was the revision of the Delegates' Version of the Bible.

Chuana, South Africa.—The new edition of the Bible is making steady progress under the care of the Rev. J. Mackenzie.

Corea.—The New Testament has been completed by the Rev. J. Ross, who has expressed his willingness to aid in any future translation of revision work, from Manchuria. A Committee has been formed for the correction of Ross's version, and the removal of Chinese words, etc.

Corea and Wen Li.—Sanction has been given for the preparation of a Diglot Gospel. As Wen Li is the literary language of Corea, and proclamations and books are frequently issued in diglot form, it was thought likely to be a material help in reading the Scriptures.

Faté, New Hebrides.—The Rev. D. Macdonald has advised the despatch of 2877 pounds of arrowroot to Melbourne towards the cost of the New Testament. Next year he hopes to complete the payment of the edition.

Füh-chow, China, Roman alphabet.—An edition of 1200 copies of Mark has been printed.

Galla, Southern, or Barareta, East Equatorial Africa.—The preparation of John has been delayed by the appointment of the translator, the Rev. T. Wakefield, to duties and deputation work. He has now revised the MS., and the Gospel is passing through the press.

Ganda, Central East Equatorial Africa.—A second edition, consisting of 1000 copies of Matthew, is being prepared, under the care of the Rev. R. P. Ashe.

Hebrew.—The Committee received with very great regret the intelligence of the death of the eminent linguist and translator of the New Testament, Dr. Franz Delitzsch, of Leipsic. It took place on March 4, and was not altogether unexpected. The work of carrying the eleventh edition through the press will devolve upon his friend Dr. Dalman, assisted by Isar Kahan, in accordance with the written wish of the great Hebraist.

Hebrew and Italian.—A diglot edition of 2000 copies of the Psalms has been sanctioned.

Hindi, India.—The Revision Committee, consisting of five Europeans and two natives, was engaged from September 17 to October 17, 1888, on the Acts.

Hindustani, Southern (Dakhani), India.—Matthew has undergone revision. The chief reviser has been at work on Proverbs, Matthew, Luke, John, and the Epistles from 1 Thessalonians to 1 John. The Rev. E. Lewis has been engaged on the Acts. The MS. of Philipians has been submitted to a native Christian convert. Proverbs and Luke and John have been finally passed, and photo-lithographic editions struck off.

Japan.—A reference Bible has been published during the year, and forms a handsome book. With maps, in a good, clear type, the columns divided, and the references placed at the top and in the centre of the page, it promises to be both convenient and useful.

Java, Roman alphabet.—The printing of the New Testament has been completed. The work done on the Old Testament comprises Genesis, Exodus, Leviticus, Joshua, Judges, Ruth, 1 and 2 Samuel, 1 and 2 Kings, Ezra, Nehemiah, Esther, Psalms, and Isaiah, and a portion of Numbers and Jeremiah.

Java, Arabic alphabet.—Mr. Haffenden, Agent of the Society at Singapur, has been authorized to inquire as to the feasibility of an accurate transliteration of a Gospel, as there are large numbers of people in Java who use the Arabic alphabet only.

Judeo-German.—Mr. Lichtenstein has completed the translation of Isaiah, and it is in the press.

Kafir or Xosa, South Africa.—The Cape Town auxiliary, in acknowledging receipt of a consignment of the new 8vo. Bible, have expressed a wish for a Bible in a more portable size. It has been agreed, however, to wait until the revised version has been some little time in circulation.

Kalmuk, Russia.—An edition of 3500 copies of Acts to the Revelation, in Professor Pozdnejeff's translation, is being printed at St. Petersburg.

Karnáta, India.—An edition of 10,000 copies of Luke has been printed. The work has been done at the Basel Mission Press, Mangalore. Matthew and Luke will next be reprinted, and it is under contemplation to issue at the same time a small edition of Matthew, with the text in Karnáta and Sanskrit on opposite pages.

Kazán-Turki, Russia.—Professor Saleman is reading the proofs of a new edition of the Gospels.

Khasi, India.—The Psalms have been carefully revised. It has been resolved to print 1000 copies, part of the edition being bound up with the Pentateuch.

Koi, India, Têlugu Alphabet.—The Madras Auxiliary has published a revised edition of General Haig's version of Luke, which was in the Roman alphabet, and not fully understood by the people.

Lifu, Loyalty Islands.—The printing of the revised marginal reference Bible, under the care of the Rev. J. Sleigh, has advanced as far as Joel.

Malay, Arabic Alphabet.—The four Gospels and Acts, printed under the care of Mr. Klinkert, of Leiden, are now published.

Malayálam, India.—The Southern delegates in two sessions have gone over John and the Acts. An experimental edition of the Bible and New Testament, each in crown 8vo., the smallest size of the Scriptures in Malayálam as yet issued, has been published. The Bible is sold at twelve annas, the New Testament at four annas. It is hoped to have a popular edition of the Bible sold at eight annas per copy.

Maráthi, India.—An edition of 2000 copies of the New Testament in 8vo., with paragraph headings prepared by the Rev. Baba Padmonji, has been printed under his superintendence. To bring the book within the reach of the poorer classes of natives, it has been decided to sell it at six annas per copy. Mr. Padmonji has also aided during the year in the revision of the New Testament, and passed through the press an edition of 10,000 copies of Matthew and 1000 copies of Psalms. The revision of the Epistle to the Ephesians is

completed, and the Revision Committee are now occupied with Matthew.

Munddri, India, Uriya Alphabet.—At the request of the Rev. J. G. Pike, the Calcutta auxiliary has agreed to print a new edition of Mark, it being found that the Kols of the Sambalpûr district do not know the Nâgari alphabet.

Nicobar Islands, Bay of Bengal.—An old translation of Matthew, made by the Danish Moravian missionaries about 1780, in the dialect of Nancowry, was discovered by the late Mr. Roepstorff, and published by his widow. The Nancowry-speaking people number about 2500.

Ningpo, China, Roman Alphabet.—The Committee agreed to print a translation of some books of the Old Testament, subject to the approval of Bishop Moule, who was asked to examine the work before it goes to press.

Ostjak, Russia.—Some delay in the preparation of a Gospel for the Ostjak has been caused by the lamented death of Professor Ahlquist, who has done so much linguistic work for the Society.

Pastû, India.—The printing of the New Testament has been completed under the care of the Rev. T. J. Lee Mayer. Genesis is now in hand, and it is hoped that the other books of the Pentateuch may follow. An edition of 5000 copies of the Psalms is also to be printed to correspond with the Pentateuch and the New Testament. The work has been done from the MS. copy by Electrotype Agency.

Persian.—An edition of 8000 copies each of Dr. Bruce's revision of Luke, John, and Acts has been ordered to be printed at Leipsic, in order to relieve the press at Cairo, which is occupied with the production of the Books of Genesis, Exodus, and Matthew.

Popo (Dahôni), West Africa.—The Book of Psalms and the Acts have been completed, and Mr. Rhodes is at work on Romans and the Epistles to the Corinthians. Galatians and Ephesians are in the hands of the copyist, and the Translation Committee are occupied with the remaining Epistles of Paul.

Rifi, Morocco, Arabic alphabet.—The MS. of the Gospel

of John has been received from Mr. Mackintosh, and an edition of 500 copies has been ordered to be printed.

Sindhi, India.—The Committee have agreed to complete the New Testament by printing an edition of 1000 copies of the portion from Philippians to Revelation. The Rev. J. Redman is superintending the printing operations.

Slave, Canada (syllabics).—The printing of the four Gospels, which had been delayed for some months at the request of Archdeacon Reeve, has been resumed. Bishop Bompas has completed the New Testament in the Roman alphabet, and says that the Archdeacon will carry it through the press, and then render it into syllabics. The Committee have cordially acceded to this double request.

Suahili, East Equatorial Africa.—At the request of the Universities' Mission the Committee have agreed to publish an edition of 1000 copies of 1 and 2 Samuel.

Suaton, China, Roman Alphabet.—An edition of 350 copies of Matthew in large type has been printed; and also two editions of the Acts, one with and the other without references.

Tamil, India.—By general consent the time has not yet come for a further revision of this version, but interleaved copies for notes and criticisms are in circulation with a view to the future.

Télugu, India.—Dr. Hay has translated the difficult book of Ezekiel, an edition of which is now being printed. A portion of the book has been submitted to the delegates for criticisms. In June Dr. Hay hopes to commence Daniel. The progress of the work has been somewhat hindered by the failing health of Dr. Hay, which necessitated his removal to the Shevaroy Hills. An edition of the new translation of Job has been issued, and has given great satisfaction to the delegates and other scholars. Dr. Hay has made a translation of the Minor Prophets. The Madras Committee also sanctioned the issue of Isaiah in Portion form. The reference New Testament is in progress.

Tenné, West Africa.—The Committee have agreed to print for use in the Mission 500 copies of a translation of Leviticus made by the Rev. J. A. Alley, of Port Lokkoh.

Tukudh, Pacific Coast of North America.—An edition of 500 copies of Genesis, Exodus, and Leviticus is being carried through the press by the Ven. Archdeacon Reeve.

Tulu, India.—The Revision Committee met at Mangalore in October, 1888, and during a session of three weeks finally revised and passed for the press the Gospels of Matthew, Luke, and John. Another session has been arranged to go over Mark and the Epistle to the Romans. A new translation of the Proverbs has been made, and an edition printed for circulation.

Transcaucasia-Turki, Russia and Persia.—The removal to Helsingfors, in Finland, of the Rev. A. Amirkhaniantz caused some delay in the printing of the Bible, but it is again going forward.

Turki (Osmānli), Greek alphabet.—A request has been received from the Western Turkey Mission at Marsovan for a pocket edition of the Bible, and especially the New Testament. The Committee have agreed to print 6000 copies of the New Testament and 3000 copies of the Old.

Uzbek Turki, Russia.—The printing of the edition of the Four Gospels has reached Luke.

Wotjak, Russia.—On the recommendation of Professor Gottwald, the Rev. John Bassilievitch has been asked to revise Matthew and to translate Mark.

ANCIENT MINES AND MINING IN MYSORE.

Wherever indications of gold have been found in Mysore, there also are to be seen remains of work which show that systematic mining had been carried on in times past by a people who must have had sound practical knowledge of the art, and who were bold and skilful miners. Although gold-mining must have been carried on on a vast scale, and for a long period of time—as witness the numerous and extensive old pits and galleries throughout Mysore—yet nothing is known of the race or the times when these works were carried out. We have historical

notices of vast sums in gold changing hands in Mysore, but so far no records have turned up of an industry which must have employed a large section of the community for a lengthened period of time. Judging of these ancient miners from what we know of the indigenous mechanical arts in Hindustan of the present day, one is apt to ascribe to these primitive workers the rudest appliances for carrying on their operations. Thus, it is often said that the *old men* merely scraped at the surface of the reefs, as the water would have prevented them digging to any depth; that the *lode* was taken away by means of "open casts" (cuttings) terraced into steps, so that basket-loads of quartz could be handed from person to person till it reached the surface: that explosives were unknown, and that large fires were used to detach masses of the lode; that timbering was not practised and ventilation ill-understood.

A close examination of many of these old mines will show that there is no foundation for assuming that the ancient miners were as ignorant as it is assumed they were, but that there is much ground for believing that mining, as it is understood in the present day, is not so much in advance of the knowledge of the ancients as would at first sight appear. In the Mysore Mine old workings have been found at a depth of 301 feet, and the shafts and passages are of such a form as to preclude all possibility of ore or water-bucket being passed from hand to hand, from bottom to surface. In places, the old drives and galleries are so narrow and the surrounding rock so tough that fires could not have been the agency by which the reef was removed. On the Kolar gold-field these workings are mostly filled in with alluvial drift, so that it is hard to follow them, and they can only be traced underground by the softer earth met with while stoping or shaft-sinking. In other parts of Mysore some of these old works are in fairly good preservation, and a description of some of these may be of interest and give some idea of the manner of mining as conducted by the ancients.

So far as has been observed the old workings are confined

to the rising ground on the hill-sides, and, as is natural in such situations and in such a climate as we have in Mysore, no great volume of water would be met with underground, and there would be no difficulty in removing such quantity as would be met with by means of Persian wheels and "gins" working a large bucket and rope. That the people who could cut the marvellous rock temples of Mahavellipuram (Seven Pagodas) near Madras, or the still more wonderful cave temples of Ellora, would experience much difficulty in cutting through the schists and slates of the Dharwars, or even the harder included quartz-lodes, is not to be thought of; and knowing, as we do, that South India was long famous for producing the finest steel in the world—wooltz—still used by Native stonemasons in preference to the best English cast steel, we cannot wonder when we find that the old gold-miners started shafts and drove galleries where modern miners, with all the appliances of science to back them, hesitate to begin work. Before the introduction of rock-drills, worked by compressed air, in Kolar, the progress made in shaft-sinking and driving was extremely slow—so slow and expensive that it was at one time thought that the works would have to be abandoned on this account; yet when, with the aid of machinery, the works were extended to 300 feet in the hard schist, *there* old workings were found, to the great astonishment of the English miners. It is not known whether the Natives used timber to protect the sides of their shafts and to keep open the galleries when stoping; wood being so easily destroyed none of it has been found as yet in the old workings, but there are marks in the old shafts which are probably recesses for the ends of the frames, and it is quite possible that the shafts now seen were at one time timbered.

There can be no doubt that the ancient miners were assisted in their operations by those who had some knowledge of the chemistry of gold and of practical assaying and refining. Some remnant of this knowledge is still to be found among the professional gold-washers. These men can neither read nor write any language, yet are

perfectly acquainted with the use of the "touchstone" and can tell to a fraction the amount of alloy in a sample tested. The poorest of them carry a bag containing a set of minute scales for weighing gold, a small wooden bottle containing a little quicksilver, a piece of Lydian stone (touchstone), a ball of black wax, small piece of dry cocoanut, and a little salt. The weights are the small red and black seeds of a species of creeper called "gundoo-manie," said to be the origin of the carat weight ($3\frac{1}{2}$ grs.); and several multiples of this standard in the shape of tiny coins. When the jalgar has secured a quantity of gold-dust mixed with heavy black sand from which it is difficult to free the gold by ordinary washing, he puts the mixture into his wooden washing dish and pours on a little water. He then adds a drop or two of mercury from his tiny wooden flask, the mouth of which is plugged with wax. A pinhole in the wax plug enables him to shake out a minute drop or two of the quicksilver, this metal being too expensive to be wasted. He now proceeds to rub the mercury well into the black sand and gold, and in a little time the grains of gold become coated with mercury and cake together, so that the black sand—which is unaffected by the mercury—can be easily washed away. Should the mercury, from any cause, not readily coat the gold, the jalgar throws in a grain or two of salt, and continues rubbing. This always proves effectual, as the salt appears to clean the mercury and makes it combine more readily with the gold. When he has collected the gold amalgam into a lump, he refolds it in a piece of damp rag and proceeds to squeeze out the superfluous mercury, which is carefully put back into the wooden flask. When all the superfluous mercury has been squeezed out, the ball of amalgam, still enfolded in the damp rag, is placed on a live coal and blown to a flame, the burning rag preventing the loss of gold from the spluttering of the amalgam when heated. As soon as the rag is completely burnt away, the jalgar knows that the mercury has also been dissipated, and that only a sponge-gold is left behind. If from the colour of the sponge-gold

the *jalgar* suspects the presence of silver or copper, which are frequently associated with gold, he tests a little by rubbing it on a touchstone, and if this test should show the presence of a large percentage of alloy (10 to 25 per cent. is considered large), he proceeds to refine his gold. This is done by breaking up the sponge-gold between the fingers, when it readily breaks up into grains, and mixing it with twice its weight of saltpetre and burning it in a piece of broken chattie. By this process the copper, if there is any, is got rid of. To free it from silver is more difficult and seldom undertaken unless the quantity of gold-dust is fairly large (half oz. or so). The gold-dust resulting from the sponge-gold is mixed with four times its weight of common salt and the mixture placed between two of the cow-dung cakes commonly used as fuel by the Natives all over India. These two cakes are carefully placed in a chattie and placed in the midst of a well-heated fire. When the two cakes are burned to ashes, the chattie is removed from the fire and its contents carefully washed in the *jalgar's* dish, and gold-dust of great purity is recovered.

Those acquainted with the European system of assaying and refining will at once perceive that these operations in gold-refining are thoroughly scientific, and must have been learned from some one thoroughly acquainted with the chemistry of the metals. The burning of common salt sets free its contained chlorine, which combines with the silver in the gold-grains and forms chloride of silver. Chloride of silver melts more readily than gold, and the ash of the cow-dung cakes absorbs the silver chloride, just as the cupel does in European assaying, and leaves the pure gold in grains, which can be collected by washing the ashes. In the same manner the means employed by the *jalgar* for removing the copper that may be present with his gold can be shown to be thoroughly scientific. The *jalgar* is a poor man, and he is also a careful man. He cannot afford to lose even the little gold deposited by abrasion on his touchstone; so he collects even this by pressing the ball of wax we have mentioned as

finding a place in his bag, against the touchstone. The gold adheres to the wax, and leaves the stone clean. Once in four or five years the ball of wax is melted down and the gold-dust recovered. The little "rules of thumb" by which the vulgar calculates the fineness of his gold, his devices for refining it, his practical knowledge of chemical processes for which he can give no reasons, all point to a time when the gold industry must have been common in India and its requirements well understood; so that it would be safe to assume that what we see of old mines now in existence, and what we know of the operations of the gold-washers, may be taken as remnants of an industry that at some distant period of time prevailed in many parts of India.—*Madras Mail*.

V. NOTICES OF BOOKS.

BIRTHPLACE OF THE ARYANS.

Mr. van der Gheyn has published in separate form the paper he read before the recent International Scientific Congress of Catholics on the origin of the Aryans (*L'Origine Européenne des Aryas*, Paris, 1889). After giving a full and careful account of all the various theories held on the point in question, and tracing the history of the new theories as to the European origin of the Aryans, he takes the opinions of Penka in detail, and subjects them to an adverse criticism. The brochure of fifty pages is rather a very readable and able summary than an independent work. But it is very useful, and merits attention. The author has evidently devoted much thought and care to the subject, and it is almost a pity that he does not venture to set forth his own conclusions—which lean to the Kaspian and Oxus region—in a more extended form.

THE MAHĀVASTU.

We have great pleasure in announcing the appearance, just as we are going to press, of the second volume of M.

Senart's important work. The greater part of the 500 pages of Sanskrit text is occupied with twenty of the most famous and popular of the Jātaka stories. We hope in a future issue to give a detailed review of this splendid volume, and will say now that the accomplished author hopes to finish the whole work in one more issue.

KURRACHEE (KARACHI): PAST, PRESENT, AND FUTURE.

With Maps, Plans, and Photographs. By ALEXANDER F. BAILLIE. (Calcutta: Thacker, Spink, and Co.; London: Simpkin, Marshall, Hamilton, Kent, and Co., Limited, 1890.) One vol. super-royal 8vo.

Mr. Baillie's avowed object in publishing this volume is two-fold. He seeks to present "a succinct collection of facts relating to the city and port of Kurrachee, which it might be difficult, at a future period, to retrieve from the records of the past;" as also to advocate "the construction of a railway system connecting the 'Gate of Central Asia' and the valley of the Indus with the native capital of India." Had he confined himself to the former of these objects, he would have produced a useful handbook for a rising port of Western India now only second in importance to Bombay: and had he somewhat amplified the local history, and described more in detail the work of the respective Commissioners of Sind (notably Sir Bartle Frere), treating of the rise and progress of education in the province, as well as educational statistics, he would have enhanced the value of his narrative. The railway question might have been matter for a separate pamphlet, or relegated to an Appendix.

In any case, our thanks are due to Mr. Baillie for a handsome publication, in which he has called attention to an interesting, but hitherto under-rated section of Her Majesty's Indian Empire, and in which, moreover, he has put forward schemes well worthy the consideration of Indian administrators and capitalists.

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